VISEOSEVEN N96D

MODEL

SERVICE MANUAL

Copyright © 1999. ViewSonic Corporation. All rights reserved.

IBM and IBM products are registered trademarks of International Business Machines Corporation.

Macintosh and Apple products are registered trademarks of Apple Computer, Inc.

ViewSonic and ViewSonic products are registered trademarks of ViewSonic Corporation.

VESA, EDID, DMPS, and DDC are registered trademarks of Video

Electronics Standards Association (VESA).

ENERGY **S**TAR is registered trademark of the U.S. Environmental Protection Agency (EPA).

No parts this document may be copied, reproduced, or transmitted by any means, for any purpose without prior written permission from **ViewSonic.**

Revision History

Revision	Date	Description Of Changes	Approval
1.0	10/31/99	Initial Issue	T. Sears

FCC Statement

This equipment has been tested and found to comply with the limits of Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and for if not installed and used in accordance with the instructions, may cause harmful interference to radio communication. However, there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause unacceptable interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of following measures

- Reorient or relocate the receiving antenna.
- Increase the separation between equipment and receiver.
- Connect the into an outlet on circuit different from that to which the receiver is connected.
- Consult the dealer or an experience radio/TV technician for help.

FCC Warning

To assure continued FCC compliance, the user must a grounded power supply cord and the provided shielded video interface cable with bonded ferrite cores. Also, unauthorized changes or modifications to ViewSonic products will void the user's authority to operate this device. Thus ViewSonic will not be held responsible for the product and its safety.

CE Certification

CE this device complies with the requirements of the ECC directive 89/3366/EEC with regard to "Electromagnetic compatibility."

Safety Guidelines

Caution: Use a power cable that is properly grounded. always use the AC cords listed below for each area

USA	(UL)
Canada	(CSA)
Germany	(VDE)
Switzerland	(SEV)
Britain	(BASE/BS)
Japan	(Electric Appliance Control Act)

In other areas, use AC cord which meets the local safety standards.

Table of Contents

Chapter 1 Features 1-1

1.1. One Touch On-Screen-Display Digital Controlled 1-1
1.2. Power-Line-Input Operating Range 1-1
1.3. DPMS (Display Power Management) 1-2
1.4. Operating Frequency 1-2

Chapter 2 Specifications 2-1

Chapter 3 Controls and OSD's 3-1

Chapter 4 Block Diagram 4-1

Chapter 5 Measured Waveforms 5-1

Chapter 6 Theory of Circuit Operation 6-1

6.1. Micro Controller System 6-1
6.2. High Voltage Control Circuit 6-2
6.3. X-RAY High Voltage Protection CKT 6-4
6.4. Soft-Start & Power Off Protection CKT & Suspend Control CKT 6-5
6.5. Video-Amplifier/On-Screen-Display 6-6
6.6. Horizontal Deflection Driving Circuit 6-7
6.7. Display Circuit 6-7
6.8. Horizontal Deflection B+ Control Circuit 6-8
6.9. Horizontal Linearity Compensation Circuit 6-9
6.10. H-Size & Pincushion Control CKT 6-10
6.11. Center Control Circuit 6-10
6.12. Brightness Blanking Reset Control CKT 6-11
6.13. Focus CKT 6-12
6.14. Vertical Deflection CKT 6-13
6.15. TDA9106 Circuit 6-14
6.16. Power Supply Operation Theory 6-16

Chapter 7 Troubleshooting 7-1

7.1. Dynamic Focus Does Not Work 7-1
7.2. Video Does Not Appear 7-2
7.3. High Voltage Generator Does Not Work 7-3
7.4. Video No R,G,B Color 7-4
7.5. Raster Does Not Appear 7-5
7.6. Vertical Not Synchronous 7-6
7.7. Horizontal Not Synchronous 7-6
7.8. Horizontal Deflection Does Not Work 7-7
7.9. Single Horizontal Line 7-8
7.10. Sync On Green Does Not Work 7-9
7.11. Pincushion & Distortion 7-9
7.12. No Voltage Output 7-10

Chapter 8 Alignment Process 8-1

8.1. Factory Adjustment Procedure 8-1
8.2. Factory Preset Data Adjustment Procedure 8-2
8.3. Color Adjustment Procedure 8-2

Chapter 9 Spare Parts List 9-1

Chapter 10 Critical Parts List 10-1

Chapter 11 Parts List 11-1

11.1. 3017-0082-0140 TCO BD 11-1
11.2. 3017-0142-0156 DISPLAY BD 11-2
11.3. 3017-0252-0151 VIDEO BD 11-3
11.4. 3017-0322-0160 MAIN/PWR/CTRL BD 11-7

Appendix:

Appendix A Schematics
Appendix B PCB Layouts
Appendix C Exploded Drawing And Parts List

Chapter 1 Features

1.1. On-View on-screen-display digital controlled

1.1.1. User friendly 4-key control and On Screen Display for finest screen adjustment:

- **CONTRAST**
- **BRIGHTNESS**
- **H-SIZE**
- **H-POSITION**
- **V-SIZE**
- **V-POSITION**
- **PINCUSHION**
- **PIN-BALANCE**
- **TRAPEZOID**
- **PARALLELOGRAM**
- **ZOOM**
- **TILT**
- **CONVERGENCE**
- **V-LINEARITY**
- **HOOKING**
- **FOCUS**
- **COLOR**
- **PURITY**
- **OSD POSITION**
- **MOIRE**
- **DEGAUSS**
- **LANGUAGE**
- **DATA RECALL**

1.1.2. Factory geometric settings for 12 preset timings.

1.1.3. Geometric settings for 6 user definable timings.

1.1.4. Factory setting for Color Temperature modes(5000°K,6500°K,9300°K).

1.1.5. Auto-tracking for stable synchronize system.

1.2. Power-line-input operating range

90~132Vac/60Hz or 180~264Vac/50Hz universal

Confidential – Do Not Copy

1.3. DPMS (Display Power Management System)

1.3.1. The PF775 is compliant with Energy Star as well as VESA DPMS spec.

1.3.2. The power dissipation is less than 15 watts for Suspend/Standby mode and 3 watts for Off mode.

1.4. Operating Frequency range

The PF775 provides wide operating ranges of horizontal frequency from 30 to 96KHz and Vertical frequency from 50 to 180Hz. This range makes the PF775 to be compatible with most video timing standard such as VGA, SVGA, VESA, XGA, ... and etc.. It supports up to 1024 x 768 @75Hz, 1280 x 1024 @75Hz and 1600 x 1200 @ 75Hz, 1600 x 1200 @ 85Hz.

Confidential – Do Not Copy

Chapter 2 Specifications

CRT	MITSHBISHI, 17" NF M41LPE21X12 Diamontron,90° 0.26mm stripe pitch, tinted, anti-electrostatic, AR film Phospher B22, Transmittance 41.5%, High Contrast
Signal Input Interface	Video: RGB analog 0.7Vp-p/75ohm (1Vp-p with sync) Sync: H.V. Separate Sync H.V. Composite Sync (TTL Compatible) Sync on green
Synchronization	Horizontal: 30 to 96KHz Vertical: 50 to 180Hz Non-interlaced/interlaced
Connector	Signal: 15pin mini D-sub Power: 3-pole receptacle
Video Bandwidth	135MHz nominal
Nominal Display Area	300x225mm
Power Supply	95~264Vac Universal
Power Consumption	130W max.
Power Saving	Suspend <15W OFF < 3W

Confidential – Do Not Copy

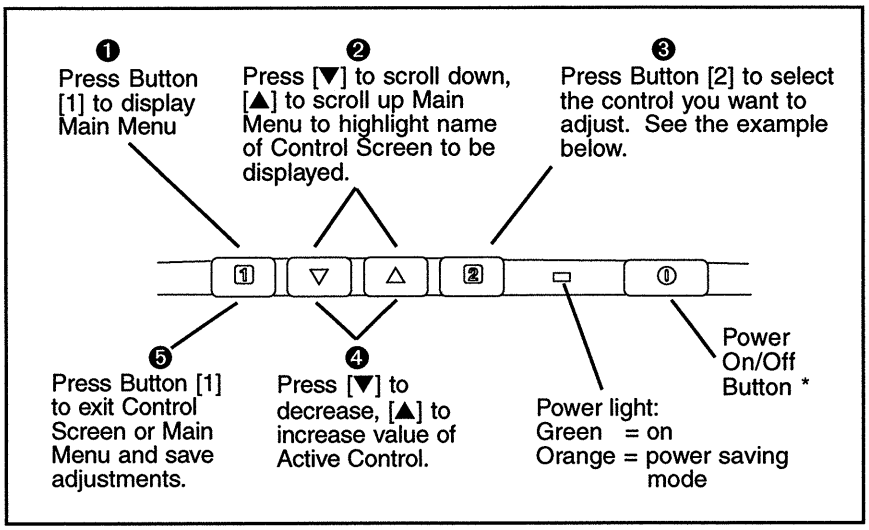
Chapter 3 Controls and OSD's

Operation

Adjust your **ViewSonic *PF775*** monitor using the buttons on the Front Control Panel to access the Main Menu and the Control Screens (see the next few pages).

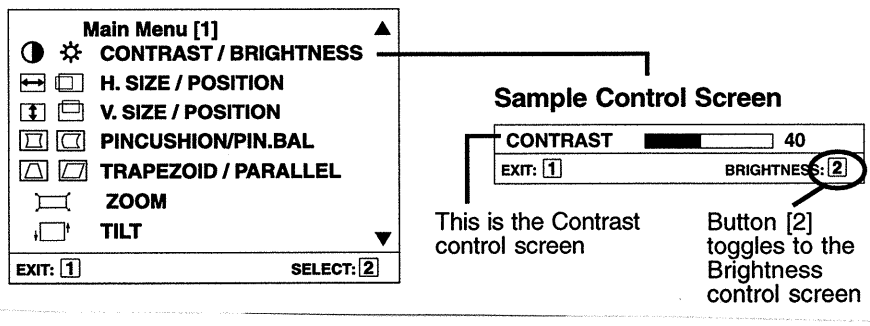
Front Control Panel

To adjust the monitor, follow the numbered steps in sequence as shown below.


❶ Press Button [1] to display Main Menu
❷ Press [▼] to scroll down, [▲] to scroll up Main Menu to highlight name of Control Screen to be displayed.
❸ Press Button [2] to select the control you want to adjust. See the example below.
❺ Press Button [1] to exit Control Screen or Main Menu and save adjustments.
❹ Press [▼] to decrease, [▲] to increase value of Active Control.
Power light: Green = on Orange = power saving mode
Power On/Off Button *

**The monitor automatically degausses each time you turn it on, removing the build-up of magnetic fields that can affect color purity and convergence. To prevent possible damage, wait 20 minutes between turning the monitor off and on again. See page 3-5 for information on how to manually degauss the monitor.*

OnView® Main Menu, part 1



Confidential – Do Not Copy

To exit the OnView® menu or screen & save changes, press button [1].

OnView Main Menu, part 1, continued

CONTRAST adjusts foreground white level of the screen image. [▼] to decrease contrast or [▲] to increase contrast.

BRIGHTNESS adjusts background black level of the screen image. [▼] to decrease brightness or [▲] to increase brightness.

H. SIZE (Horizontal Size) adjusts the width of the screen image. [▼] decreases width, [▲] increases width.

H. POSITION (Horizontal Size) moves the screen image left or right. [▼] moves screen left, [▲] moves screen right.

V. SIZE (Vertical Size) adjusts the height of the screen. [▼] decreases screen height, [▲] increases screen height.

V. POSITION (Vertical Size) moves the screen up and down. [▼] moves screen down, [▲] moves screen up.

PINCUSHION straightens vertical sides of the screen. [▼] curves vertical edges inward, [▲] curves vertical edges outward.

PIN BALANCE curves the vertical edges of the screen to the right or left. [▼] curves vertical edges to the left, [▲] curves vertical edges to the right.

TRAPEZOID makes vertical edges of the screen image parallel. [▼] narrows top and widens bottom, [▲] widens top and narrows bottom.

PARALLEL (Parallelogram) slants vertical edges of the screen to the left or right. [▼] slants vertical edges to left, [▲] slants vertical edges to right.

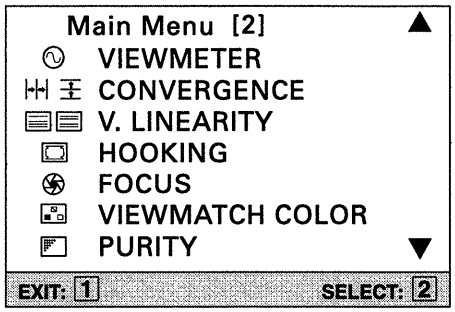
ZOOM expands and contracts the entire screen image. [▼] contracts the screen image. [▲] expands the screen image.

TILT rotates entire screen image. [▼] rotates screen image counter-clockwise, [▲] rotates screen image clockwise.

Confidential – Do Not Copy

To exit the OnView® menu or screen & save changes, press button [1].

OnView Main Menu, part 2



VIEWMETER® displays the frequency signal input (horizontal scan and refresh rate) coming from the graphics card in your computer.

H. CONVERGENCE (Horizontal Convergence) adjusts horizontal color alignment. Use only if you see red or blue around the horizontal segments of black letters on a white background. Press [▼] or [▲] to adjust.

V. CONVERGENCE (Vertical Convergence) adjusts vertical color alignment. Use only if you see red or blue around the vertical segments of black letters on a white background. Press [▼] or [▲] to adjust.

V. LINEARITY CENTER (Vertical Linearity Center) adjusts the vertical distortion at the center of the screen image. Press [▼] or [▲] to adjust.

V. LINEARITY SYMMETRY (Vertical Linearity Symmetry) adjusts the vertical distortion by balancing the vertical distortion between the top and the bottom of the screen image. Press [▼] or [▲] to adjust.

NOTE: Both V. LINEARITY CENTER and V. LINEARITY SYMMETRY are advanced controls to be used for set up and calibration only. To return these controls to factory settings use DATA RECALL (see page 3-5).

HOOKING straightens the four corners of the screen image. Press [▼] or [▲] to adjust.

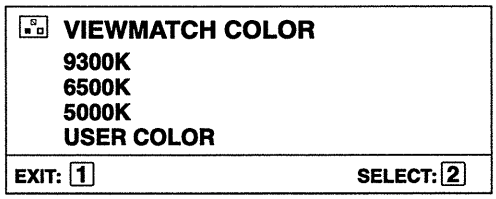
FOCUS adjusts the sharpness of the screen image. Press [▼] or [▲] to adjust.

Confidential – Do Not Copy

OnView Main Menu, part 2, continued

VIEWMATCH® COLOR provides four color adjustment options: three preset color temperatures and User Color, which allows you to individually adjust red, green, and blue (RGB).

To activate one of the three preset color temperatures, highlight your selection by pressing [▼] or [▲] and then press button [2]. The factory setting for the monitor is 9300°K, the color temperature most frequently used in offices with fluorescent lights.



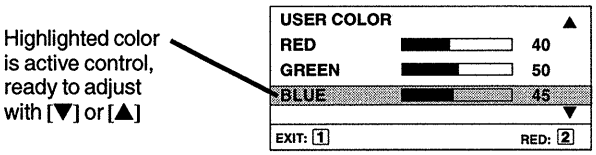
To adjust USER COLOR:

1 With USER COLOR highlighted on the VIEWMATCH COLOR screen shown above, press button [2] to activate USER COLOR. The screen below appears.

2 To select red, green, or blue, press button [2] to highlight your selection.

3 To adjust a color, press [▼] or [▲]. The number next to the status bar changes accordingly.

4 To save your adjustment and exit a color, press Button [1].



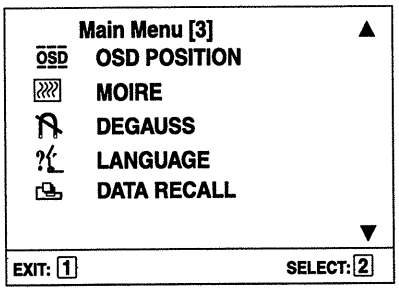
PURITY adjusts the color evenness of the overall image. Press [▼] or [▲] to adjust.

NOTE: If you see unevenness in a color (such as one area of a color appearing darker than another area), first use DEGAUSS (see page 3-5), then if color unevenness is still present, use PURITY.

Confidential – Do Not Copy

To exit the OnView® menu or screen & save changes, press button [1].

OnView Main Menu, part 3



OSD POSITION allows you to reposition the OnView display (including all menus and control screens). Press [▼] or [▲] to move the OSD. To exit this screen, press button [1].

MOIRE reduces interference that causes unwanted color textures or patterns. Press [▼] or [▲] until interference patterns disappear.

DEGAUSS removes the build-up of magnetic fields that can cause irregular colors to appear around the edges of screen images. There are two ways to degauss the **ViewSonic** ***PF775:*** automatically by turning the monitor on, or manually by selecting the Degauss control from OnView Main Menu, part 3.
Important: *Do not degauss repeatedly. Doing so can be harmful to the monitor. Wait at least 20 minutes before using this control again.*

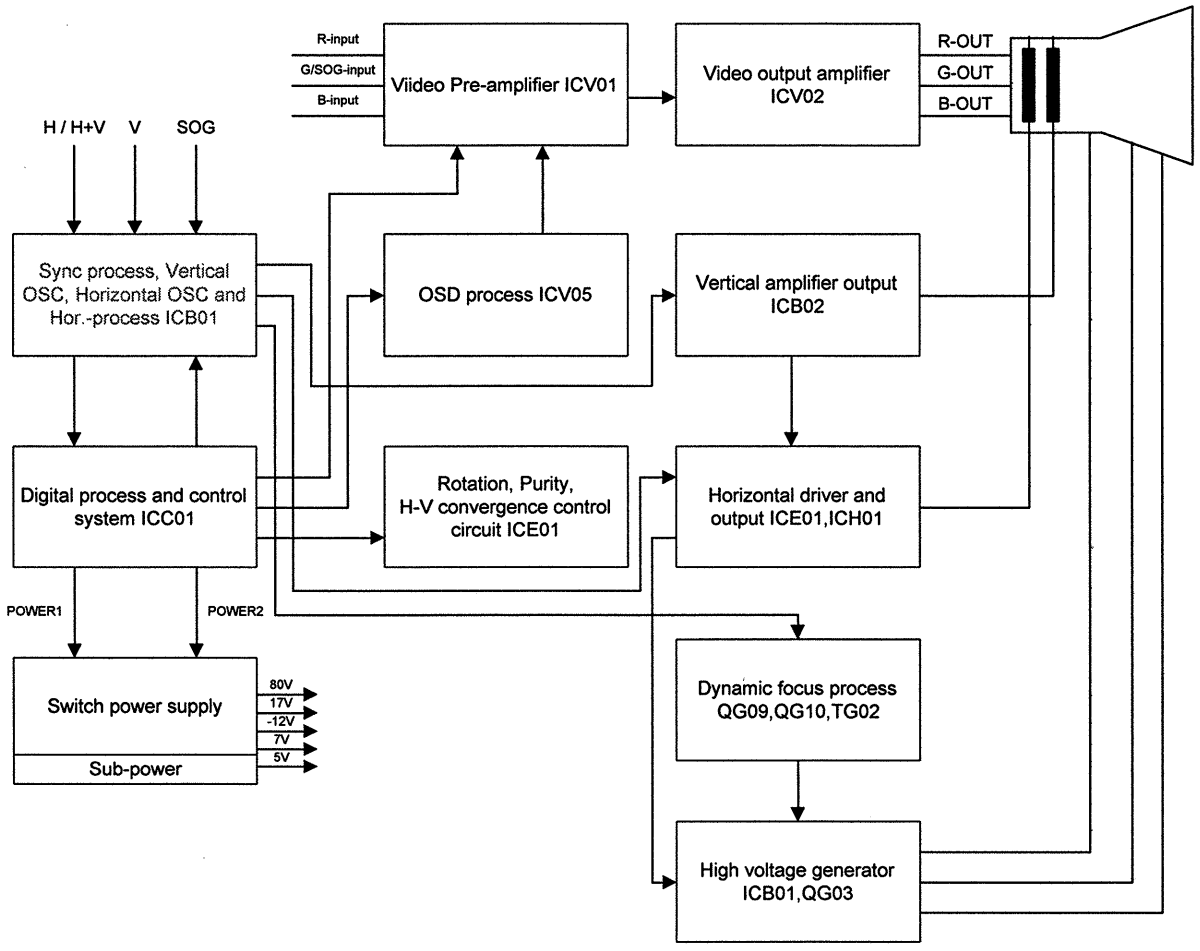
LANGUAGE allows you to choose from among five languages for the OnView menus and control screens; English, French, German, Italian, and Spanish. To select a language press button [2]. To exit this screen, press button [1].

DATA RECALL returns all controls back to factory settings (only if the monitor is set to one of the factory preset modes shown on the Specifications page).

NOTE: Using this control resets color to the 9300° K.

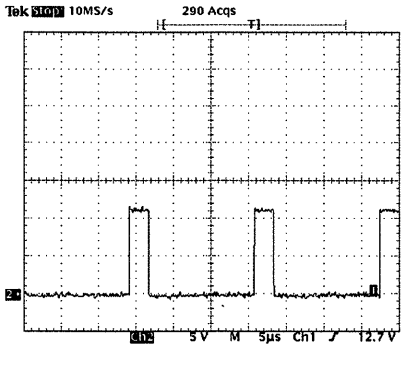
Confidential – Do Not Copy

Chapter 4 Block Diagram

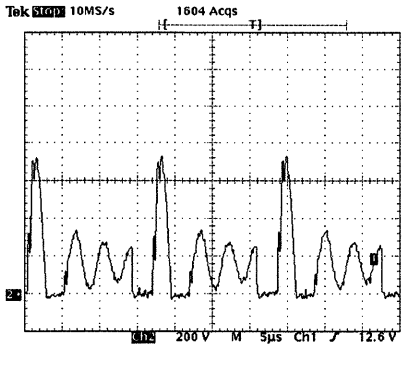


Confidential – Do Not Copy

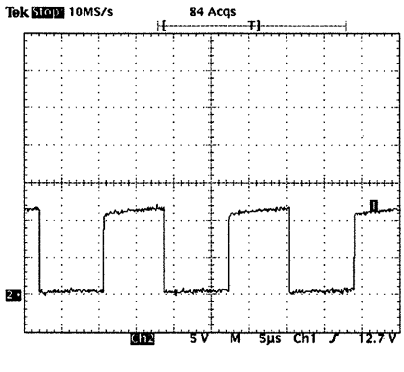
Chapter 5 Measured Waveforms



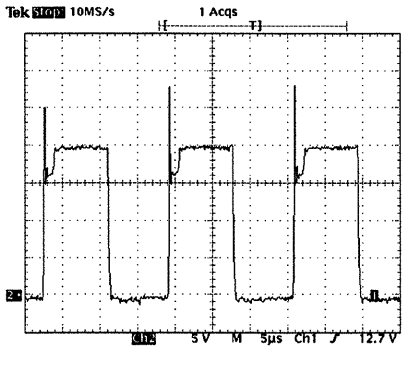
24 Jun 1997
14:06:46 **S1**



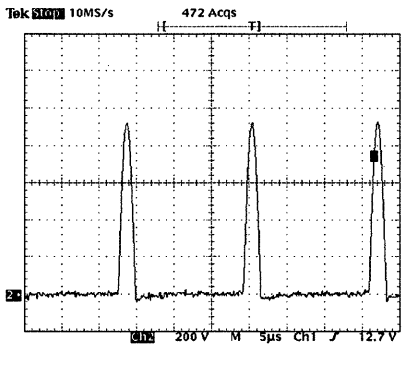
24 Jun 1997
13:57:06 **S2**



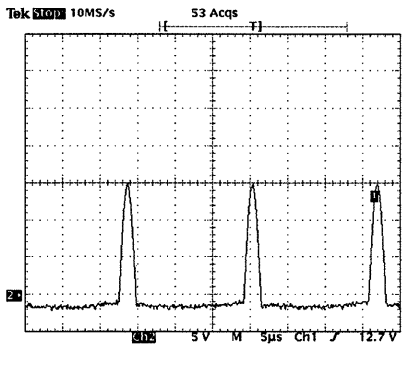
24 Jun 1997
14:05:56 **S3**



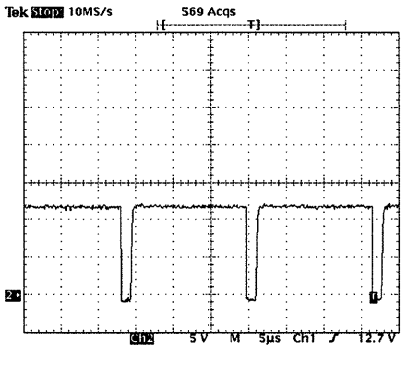
24 Jun 1997
14:02:52 **S4**



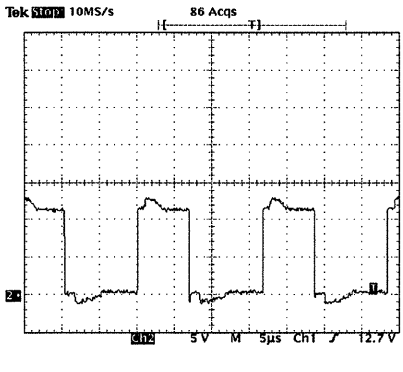
24 Jun 1997
13:58:12 **S5**



24 Jun 1997
14:07:32 **S6**

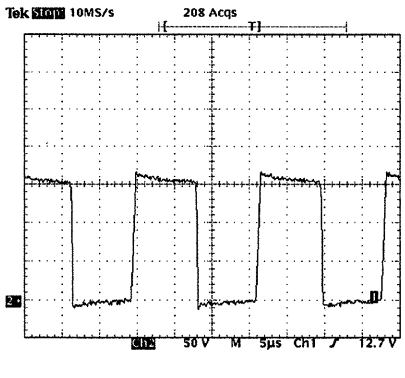


24 Jun 1997
14:04:24 **S7**

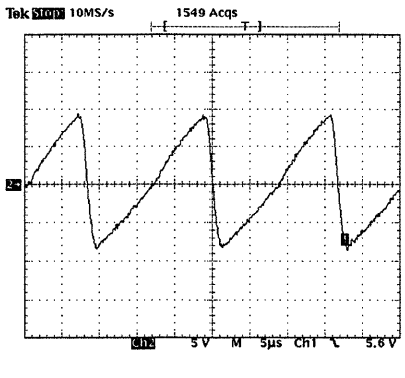


24 Jun 1997
14:05:09 **S8**

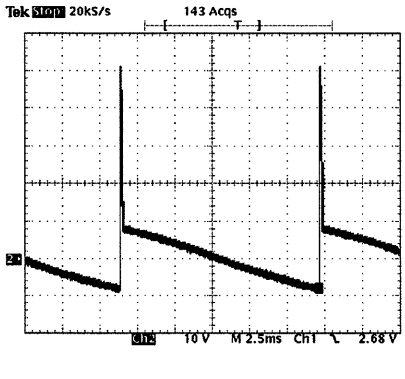
Confidential – Do Not Copy



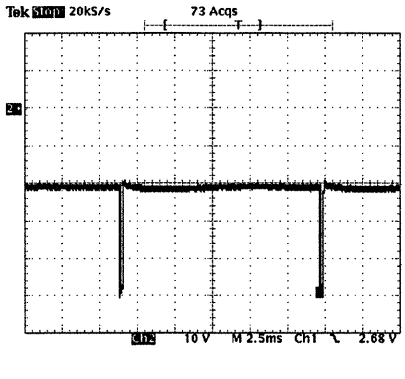
24 Jun 1997 13:59:48 **S9**



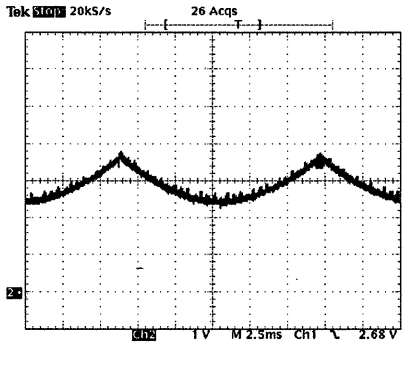
24 Jun 1997 14:19:43 **S10**



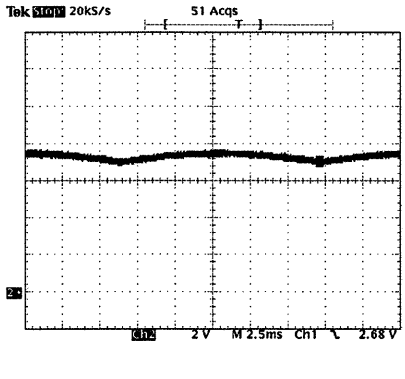
24 Jun 1997 14:11:18 **S11**



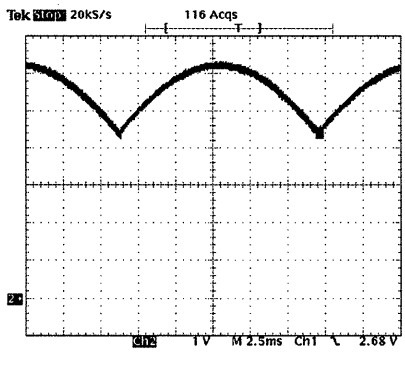
24 Jun 1997 14:12:41 **S12**



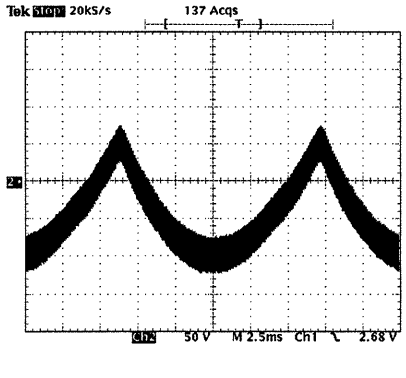
24 Jun 1997 14:15:46 **S13**



24 Jun 1997 14:16:46 **S14**

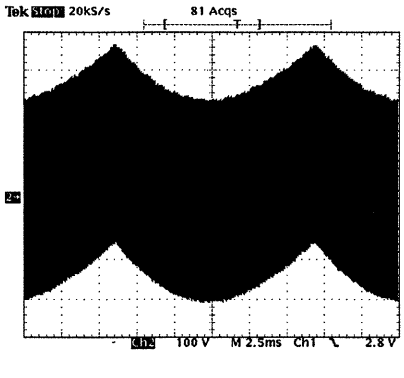


24 Jun 1997 14:15:00 **S15**

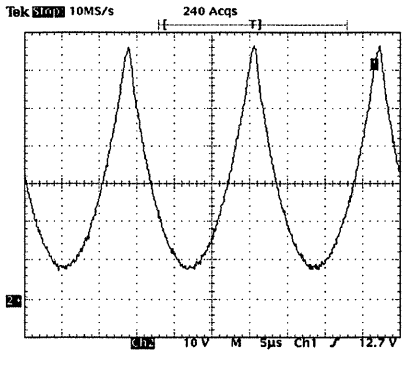


24 Jun 1997 14:13:42 **S16**

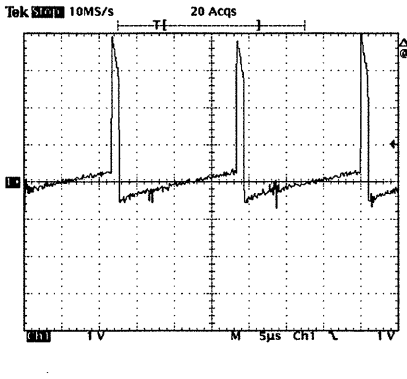
Confidential – Do Not Copy



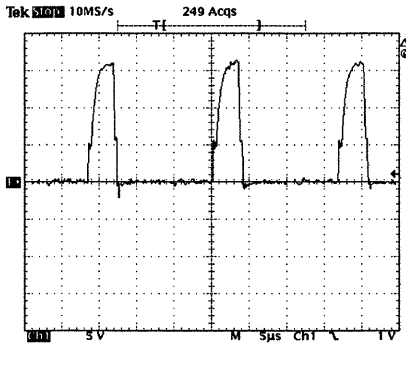
24 Jun 1997
14:24:54 **S17**



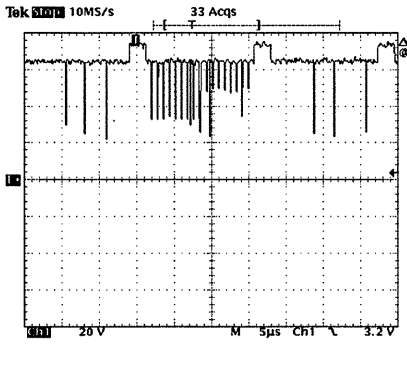
24 Jun 1997
14:00:55 **S18**



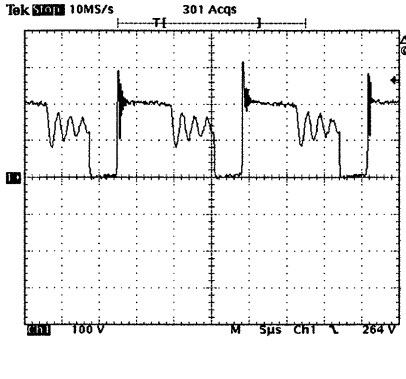
22 May 1997
14:34:03 **S19**



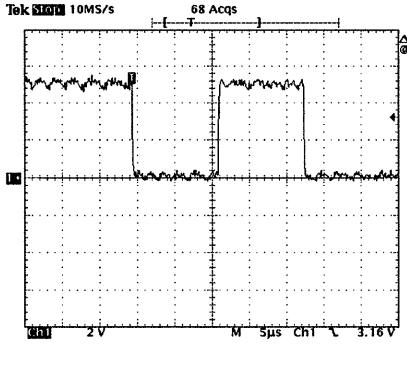
22 May 1997
14:34:55 **S20**



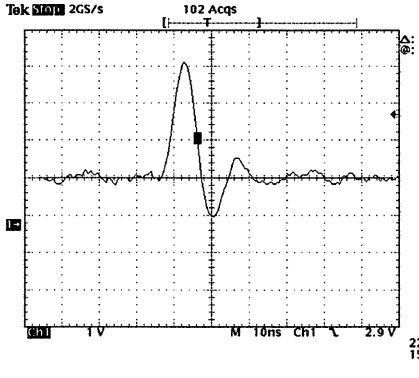
22 May 1997
14:49:39 **S21**



22 May 1997
14:35:57 **S22**



22 May 1997
14:44:08 **S23**

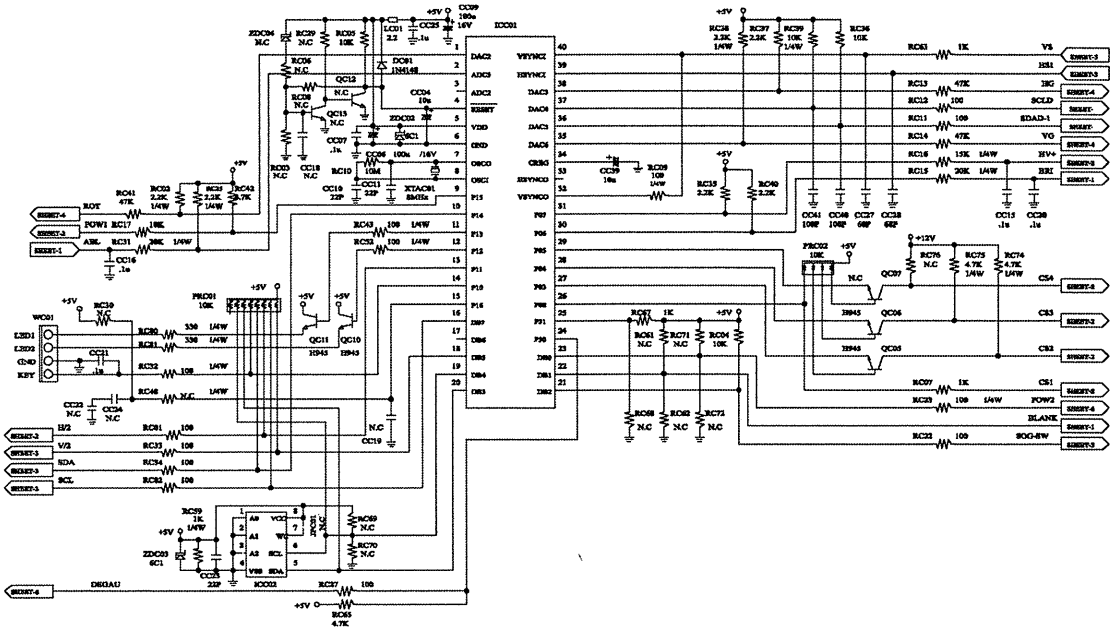


22 May 1997
15:09:26 **S24**

Confidential – Do Not Copy

Chapter 6 Theory of circuit operation

6.1. Micro Controller System



The micro controller system is composed of the MCU, the serial E2PROM, the voltage monitor circuit, the encoder signal reshaping circuit.

6.1.1. The MCU (ICC01, NT68P62) mainly provides the following functions:

6.1.1-a. Detect the system input signals and send proper control signals via general purpose I/O pins.

6.1.1-b. Output 6 PWM's to adjust the voltage controlled functions such as BRIGHTNESS, TITL,..,etc.

6.1.1-c. Control the following characteristics of the deflection IC TDA4854 and the video pre-amp M52743 via I2C bus:

- **TDA4854:**
  1. H- SIZE,H-POSITION
  2. V-SIZE,V-POSITION
  3. PINCUSHION, PIN-BALANCE
  4. TRAPEZOID, PARALLELOGRAM
  5. H-CONVERGENCE, V-CONVERGENCE,
  6. V-LINE-CEN, V-LINE-SYM
  7. HOOKING
  8. H-FOCUS, V-FOCUS,
  9. MOIRE
  10. HD-DUTY
  11. Internal clamping pulse position & width

Confidential – Do Not Copy

- **M52743:**
  1. Contrast, OSD Contrast
  2. R,G,B gain

6.1.1-d. Control the OSD IC D1642 via IIC bus to display the monitor status.

6.1.1-e. Detect the input sync characteristics via TDA4854, identify the input timing, read the according settings in the E2PROM and then send proper controls such as CS-switch, LEDs display, Contrast, Brightness, H-Size, H-Pos, ..., etc.

6.1.1-f. Monitor the level of DAC output ABL and then send the proper contrast setting in M52743 to achieve the beam current limitation .

6.1.1-g. Set and detect the display board status and implement the ADC input KEY and signals..

6.1.1-h. Provide the DDC1/2B/2B+ interface to PC system or auto-alignment system.

The serial E2PROM ICC02 (24LC04) memory device to reserve the fixed monitor parameters, the factory alignment result, the user adjusting result, the user defined timing characteristics, ..., etc. While is only readable and optional to change the preset timing modes and/or their ID/name displayed on the OSD.

The propose of the voltage monitor circuit composed by DC01,RC05,CC04 is to keep the MCU working normal when the supply voltage is unstable. It is done by resetting the MCU while the supply voltage drops.

6.2. High Voltage Control Circuit

High Voltage Control Circuit is working basically by using switching theory with the main component ICB01 (TDA4854).

6.2.1. Circuit operating theory is explained as following:

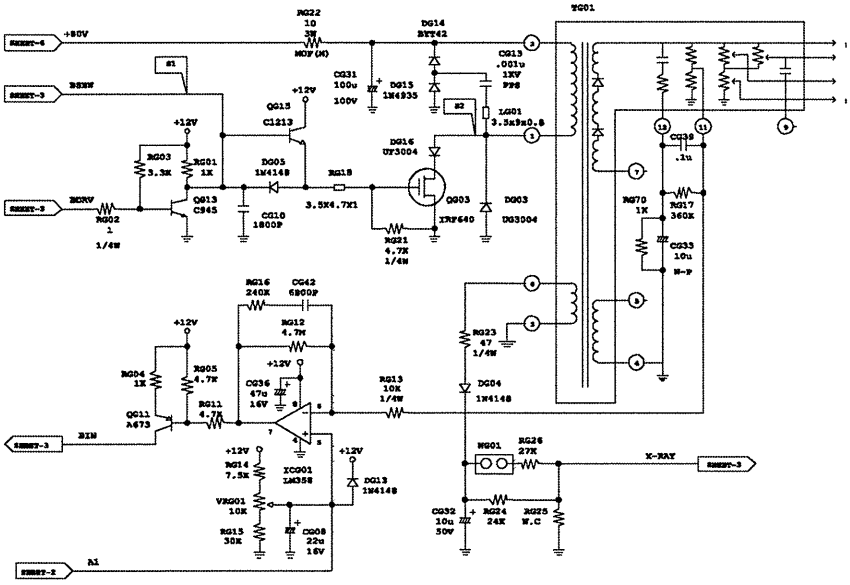
6.2.1-a. When Power ON and the Vcc DC level of pin6 of ICB01 (TDA4854) exceeding 0.6V, ICB01 starts to work and the oscillate frequency is decided by RB25,RB26,CB10.

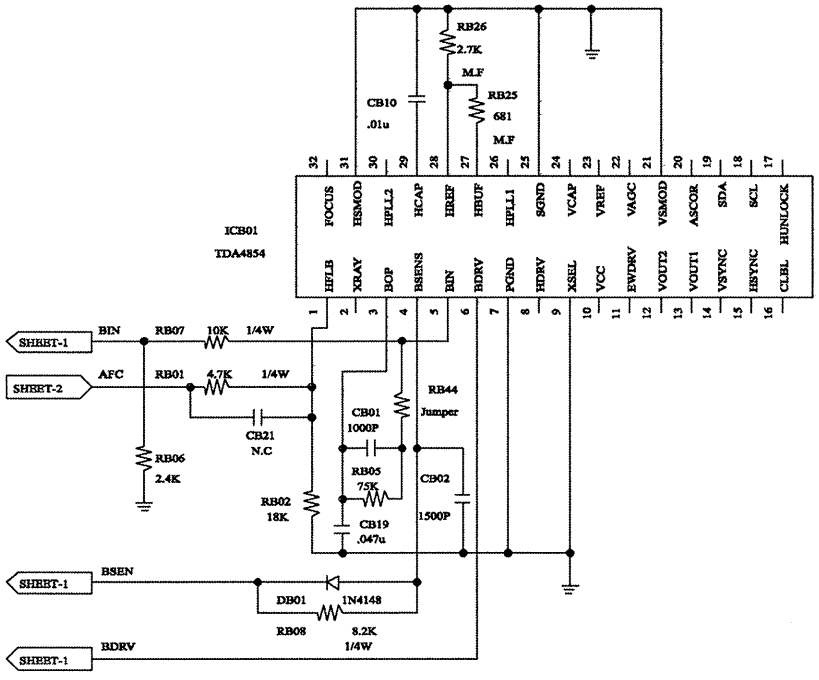
6.2.1-b. When ICB01 is working normally the output square wave of pin4 ***as figure S1*** will turn on QG03. The ON/OFF cycle of QG03 will make the primary of FBT (pin 1 ~2) acted like a Switching Power X'FMR ***as figure S2.***

6.2.1-c. AFC signal ***as figure S6*** is differential by RB01 in order to force ICB01 in synchronization. Then, the high voltage will be always synchronized with horizontal deflection.

Confidential – Do Not Copy

6.2.1-d. Usually loading change will cause unstable condition, so a high voltage feed back system is designed to maintain the stability of the high voltage circuit. This feed back system is started from voltage sensor on the pin11 of the FBT. This sensor voltage compares with voltage of the OP2 via the buffer of LM358 and returns to ICB01.





Confidential – Do Not Copy

6.2.2. LM358 OP2 is controlled by following factors:

6.2.2-a. A feed back reference high voltage circuit that consists of RG14, VRG01, and RG15 to adjust the high voltage.

6.2.2-b. A1 voltages are controlled by QH03, QH23 and TH02:

(1) When horizontal deflection is no function, TH02 secondary can not sensor the voltage form, so QH03 turns OFF and QH23 turns ON to make A1 voltage dropped. QG11 collector voltage raises to make the pin5 voltage of ICB01 also increased. The duty cycle of pin6 of ICB01 is reduced to zero gradually to shut down the high voltage. In the same time, the high voltage Soft-Start CG08 is discharged via A1 route to secure the high voltage is re-started at Soft-Start status.

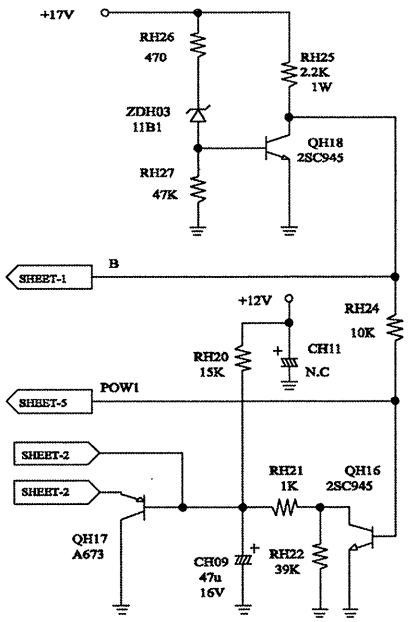
(2) When horizontal deflection is working, TH02 sensors the voltage form ***as figure S10***. Via QH05 and CH07 processors, A1 voltage will not be by affected by QH03 and this will keep the high voltage works normally.

6.3. X-RAY High Voltage Protection CKT

X-RAY High Voltage Protection CKT is to get a DC level voltage by utilizing the output waveform of FBT's pin6 to pin3 (GND) via a rectifier consists of DG04, CG32. This DC level voltage inputs to the pin2 (X-RAY) of ICB01 TDA4854. The preset X-RAY protection voltage is 4 volts. If the high voltage is higher than the preset voltage, the DC level voltage input into the pin2 will also be higher than 4 volts to make the pin8 of ICB01 off. It also means the HD signal is off, then horizontal deflection is off and the high voltage is also off.

Confidential – Do Not Copy

6.4. Soft-Start & Power Off Protection CKT & Suspend Control CKT



6.4.1. Soft-Start:

During the instant period of power on, unstable condition of horizontal deflection will easily damage components. So, Soft-Start is designed to control such an unstable condition.

When power on, during the period that 12 volts increases from 0 volts to 12 volts, the DC level of QH17 is controlled by RC Constant circuit RH20 and CH09.

QH17 controls the level at pin5 of ICH01 LM555. The width of the duty cycle at pin3 of ICH01 LM555 will be gradually increased. Till the CH09 is fully charged, QH17 is off is not working. In a similar working theory, RH20, CH09 and RH21 control the level of ICH01 LM555 pin5.

6.4.2. Power Off Protection CKT:

In order to turn off the B+ of horizontal deflection when power is off, QH18 are designed to meet the purpose.

When power off, the 17 volts decreases and the base level of QH18 is dropped. So QH18 is still on.

Confidential – Do Not Copy

6.4.3. Suspend Control CKT:

When entering Suspend Mode will send out a high level that will make:

6.4.3-a. QH04 ON and B+ driving waveform is OFF, so the horizontal deflection is not working. QH03 OFF, QH23 ON, B voltage level drops and ICB01 pin5 level raises. The duty cycle width at pin6 is reduced and till no output, then the high voltage is OFF.

6.4.3-b. QH16 is on and CH09 is discharge through QH16, then QH17 is on turns ICH01 off. Since CH09 is discharge through QH16, the Soft-Start works when B is low level.

When monitor is from suspend back to normal mode, A1 is low level B and QH16 are off. The output is back to normal when CH09 makes Soft-Start worked and ICH01 is not controlled by QH17. So, Horizontal deflection and high voltage work normally.

6.5. Video-Amplifier/On-Screen-Display

The video amplifier system is consist of the Pre-Amplifier, the Video-Power-Amplifier, and the Cutoff-Voltage-Adjusting circuits.

6.5.1. The functions of the Pre-Amplifier ICV01(M52743) include:

6.5.1-a. The small signal video amplifier controlled by MCU via I2C bus for the features of contrast (main gain control), output DC level 3 sub gain controls (R-Gain, G-Gain, B-Gain), clamping pulse source (AFC) and the clamping pulse width.

6.5.1-b. The OSD mixer processes the OSD-BI, OSD-RI, OSD-GI on Pin4,9,13 and the OSD BKG input on Pin1 and the OSD contrast is controlled by MCU via I2C bus.

The Video-Power-Amplifier ICV02 is a 3-channel hybrid-IC which functions as a cascade type transistor amplifier to reach the high bandwidth performance.

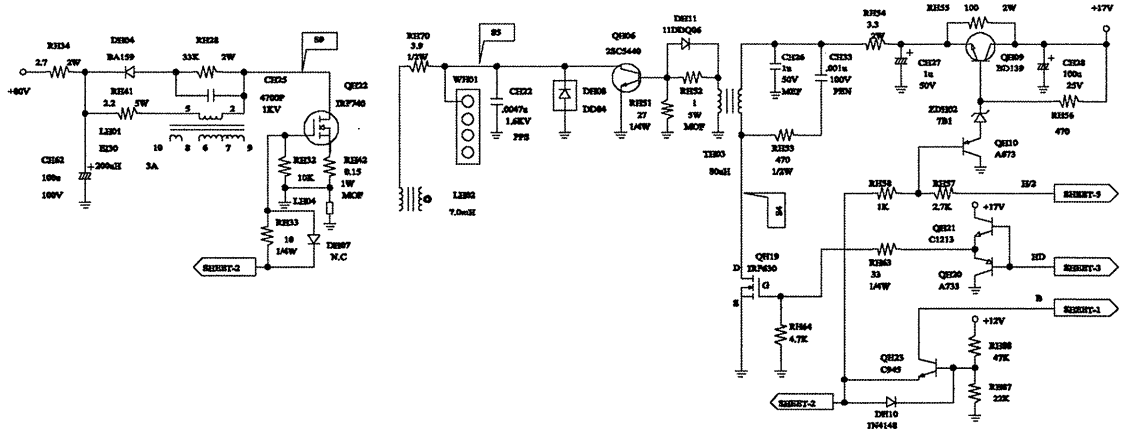
The Cutoff-Adjusting circuit consist of ICV06, QV04, QV05, QV06 is to provide the function of dark/background white-balance control by varying the peak voltages on the CRT cathodes. (Only R, G, B guns)

ICV05 (D1642) serving as the OSD generator outputs the R, G, B, FBKG signals that contain the information by which the MCU shows the monitor's status and the user adjusting indications. The R, G, B, FBKG signals are synchronized by the horizontal and vertical deflection sync input on Pin5 and Pin10. The MCU controls the OSD via the signals SDA, SCL on pin7,8.

*(the schematic diagram refer to **the sheet 7 of the Schematic section**)*

Confidential – Do Not Copy

6.6. Horizontal Deflection Driving Circuit



6.6.1. HD signal ***as figure S3*** is output from pin7 of ICB01 TDA4854 and through QB01 and QB02 to drive QH19 IRF630 and TH03. ***Refer to figure S4***

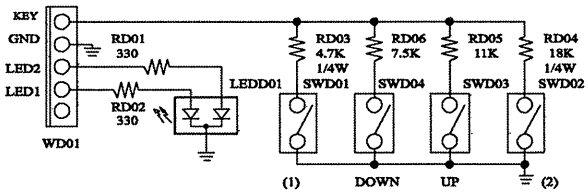
6.6.2. TH03 controls the driving current via ICE01 LM324 OP1 and QH09.

6.6.2-a. ICC01 H/2 control the reference voltage via ZDH02.

6.6.3. Through above items a and utilizing TH03 to drive QH06, the LC oscillation circuit that consists of defection coil CH22 and DH08 works. ***Refer to figure S5***

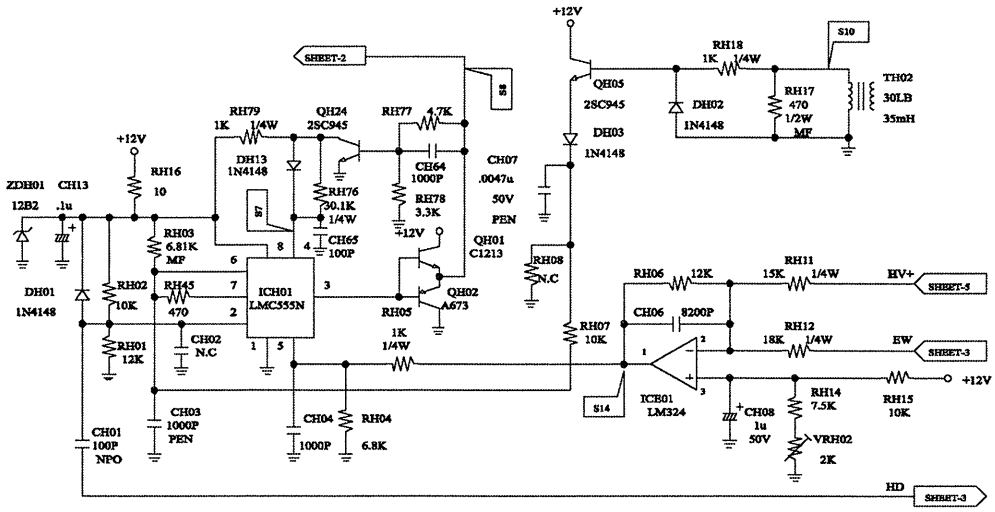
6.7. Display Circuit

The display board includes the LED driving circuit (MCU controlled by LED1 and LED2 to drive, key detecting circuit (SWD01, SWD02, SWD03, SWD04 to MCU ADC input).



Confidential – Do Not Copy

6.8. Horizontal Deflection B+ Control Circuit



6.8.1. ICH01 Trigger circuit:

ICH01 is via RH03,RH45 and CH03 to get RC oscillation. The frequency is decided by the trigger at pin2. The pin5 controls the duty width of output waveform. ICH01 Trigger CKT is mainly controlled by following:

6.8.1-a. Trigger composite circuit: Signal ***as figure S3*** is composition of HD via QB02. HD is square waveform.

6.8.1-b. Reference voltage waveform: ICE01 OP2 controls it.

6.8.1-c. Trigger output circuit: OP2 combines above circuit.

6.8.2. Operating description:

6.8.2-a. During the power on instance, the horizontal deflection is not working, so the trigger composite circuit has only HD signal at pin5 of ICE01 OP2. In the same time, the reference voltage compares with pin5 and outputs the same waveform as HD signal.

6.8.2-b. The output of QB02 is differential by CH01 and RH01, then inputs into pin2 of ICH01. QH17 controls pin5 of ICH01 and make the output duty width at pin3 of ICE01 expanded gradually and via TH01 to drive QH22. ***Refer to figure S8.***

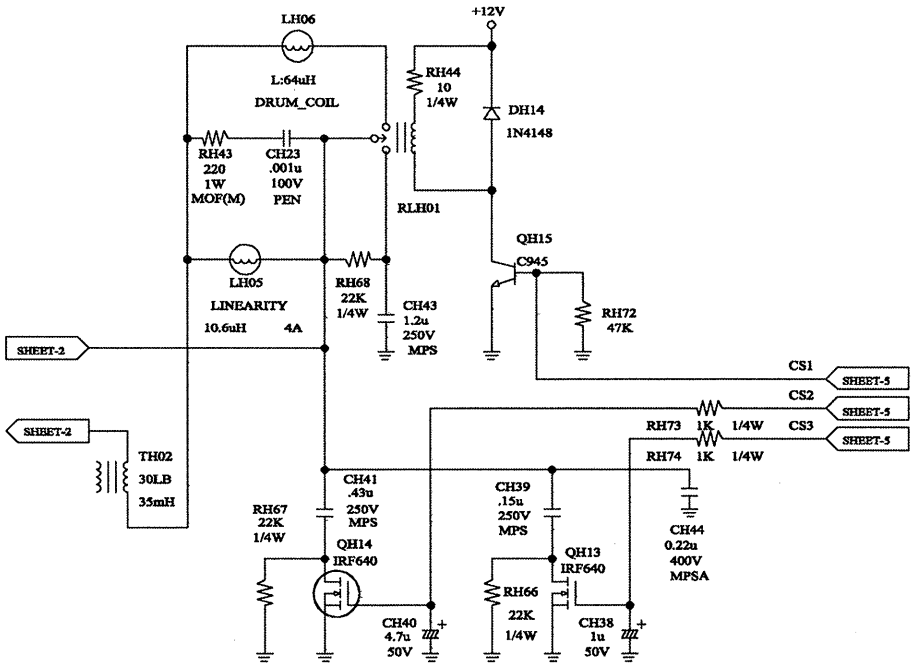
6.8.2-c. After QH22's driven, the B^+ ***as figure S9*** is output to LH02 and the horizontal deflection starts operation.

Confidential – Do Not Copy

6.8.2-d. The horizontal deflection works steadily after above 1 to 3 steps are completed.

6.8.2-e. ICH01 LM555 is a mono stable oscillator. In high frequency, the trigger Duty becomes double trigger and makes the output frequency dropped when the trigger Duty is smaller than the output Duty width, thus there is no enough B^+ for horizontal deflection. In order to have enough B+ and precise output Duty in the high frequency, QB02 is differential via CH64, RH77 and RH78 and triggers QH24 to control the output Duty at pin4 of ICH01. ***Refer to figure S7***

6.9. Horizontal Linearity Compensation Circuit



This circuit is designed to minimize the horizontal linearity variations in different horizontal frequency. There are two parts in this circuit:

6.9.1. Inductance compensation circuit:

The main component is LH06 (Linearity coil). The compensation circuit consists of QH15.

6.9.2. Capacitance compensation circuit:

CH44 is Cs capacitors. QH13 controls CH39, QH14 controls CH41. **ICC01 NT68P62** pin28(CS3), pin27(CS2) and pin26(CS1) controls QH13 and QH14 respectively. So, different frequency has different combination to meet the requirement.

For example: When frequency is 31KHz, ICC01 makes CS1~CS3 in high level. Thus, QH13 and QH15 Drain-Source is on to make the Cs capacitance equal to CH44+CH39+CH41=0.22μF+0.15μF+0.43μF+1.2μF=2μF.

Confidential – Do Not Copy

6.10. H-Size Pincushion Control CKT

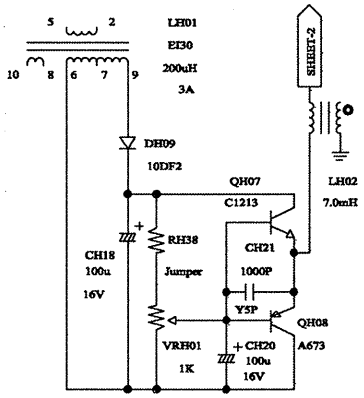
H-Size & Pincushion are used to control B+ that will change the horizontal deflection amplitude. To control B^+, the amplitude at ICH01 pin5 and the Duty width at ICH01 pin3 have to be changed. So ICH01 pin5 connects the control CKT that consists of ICE01 OP1. The feed back amplitude at pin2 and adjustment level at pin3 will be compared in OP1. The comparison result will input into ICH01 pin5. OP2 will combine H-Size internal and external adjustments and East-West Correction.

6.10.1. VRH02 is mainly to preset the H-Size of each mode, and ICC01 pin31 is to change each specified mode.

6.10.2. In the Pincushion control, a parabolic waveform ***as figure S13*** is from pin11 EWDRV of ICB01 TDA4854 and into ICE01 OP1 to create a output parabolic waveform. ***as figure S14***

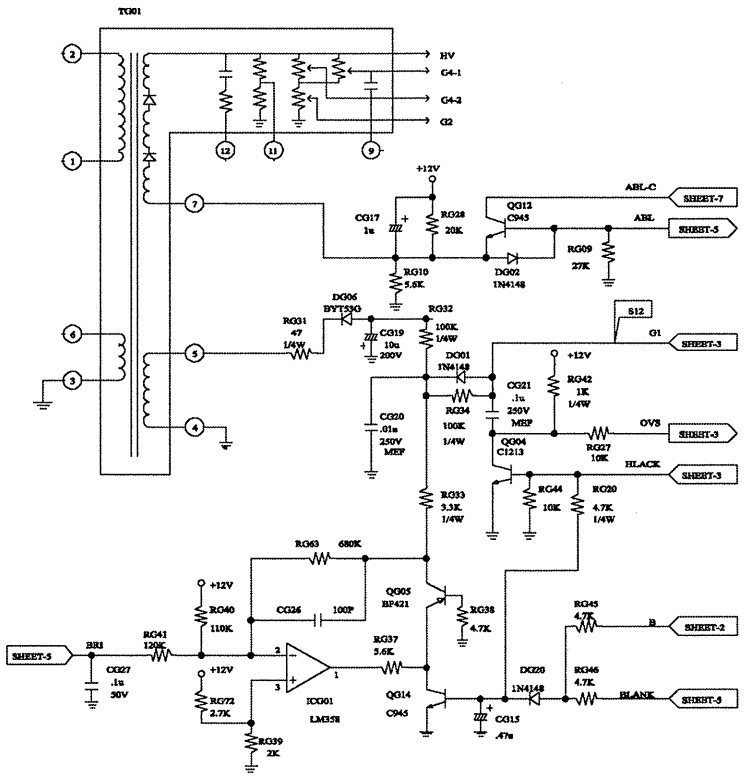
6.11. H-Center Control Circuit

H-Center is designed to adjust the Raster's center position by using the secondary current of LH01. This current is rectified through DH09, CH18 and to generate a DC current that will through the adjustment of RH38, VRH01 and RH39. Finally, the current is through the emitter follower, QH07 and QH08, and into LH02 to increase and decrease the horizontal deflection current.



Confidential – Do Not Copy

6.12. Brightness Blanking Reset Control CKT



Change the Brightness level by controlling the G1.

6.12.1. In normal working condition, the G1 waveform is synchronized with the vertical sync waveform ***as figure S12***. Since the purpose is to blank the vertical flyback scanning line when vertical is flyback, so the HLACK vertical deflection waveform through RG44, QG04 is used to control it.

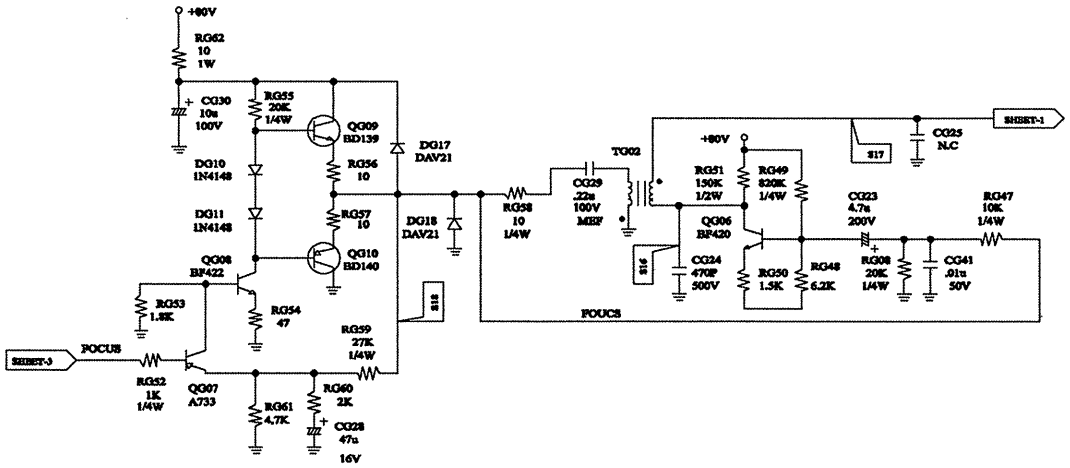
6.12.2. Brightness control is via the control at pin30 of ICC01 (NT68P62) pin30 and through the control at ICG01(LM358) OP1 and QG05 to control the DC level of G1.

6.12.3. When frequency is changed, the pin22 Blank of ICC01 will output a high level to RG46,DG20 to make QG14 on. In the same time, thus QG05 off and to get G1 voltage -180V and to blank the screen. After the frequency changed, the pin22 of ICC01 will output a low Level to make QG14 OFF. In the same time, QG05 is not controlled by the pin22 of ICC01 and the Brightness control works normally.

6.12.4. When mode changes from power on to suspend, B will output a high level to make QG14 and QG03 on. QG05 base has positive signal to make QG05 off, to get G1 -180V and to blank the screen.

Confidential – Do Not Copy

6.13. Focus CKT



Dynamic Focus is used to get perfect focusing of each dot on the screen.

6.13.1. There are H-Focus and Focus (H and V):

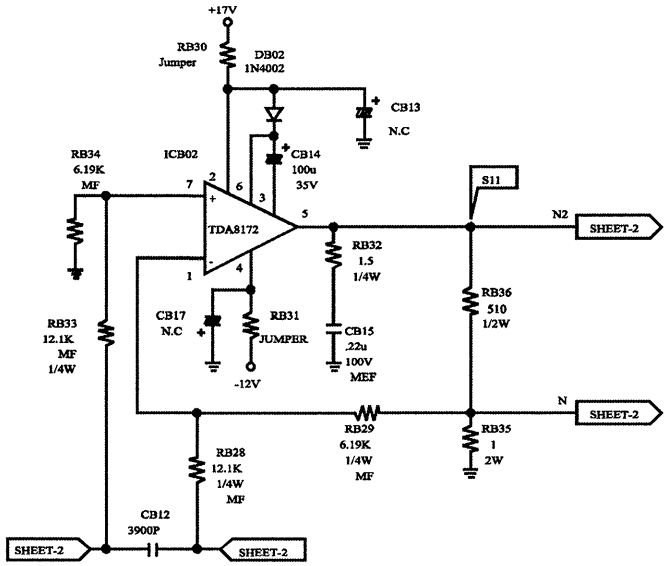
6.13.1-a. Focus(H) ***as figure S18***: ICB01 pin32(Focus) outputs a parabolic waveform and through RG52 and QG07 into QG08 to get a reverse amplified waveform. This waveform is via the emitter follower, QG09 and QG10, as a current gain then input into TG02.

6.13.1-b. Focus(V) ***as figure S16***: ICB01 pin32 outputs a parabolic waveform. This Waveform is amplified by QG06 and input into TG02.

6.13.1-c. Focus (H and V) are into TG02 to get a combined output waveform that will input to FBT pin9.

Confidential – Do Not Copy

6.14. Vertical Deflection CKT



6.14.1. Vertical deflection Saw-tooth waveform is provided by ICB01 pin12 (VOUT2) and amplified by TDA8172.

6.14.2. A voltage multiplier, connected to pin3 and pin6, consists of DB02 and CB21 is designed to avoid flyback scanning line appeared during the vertical flyback period.

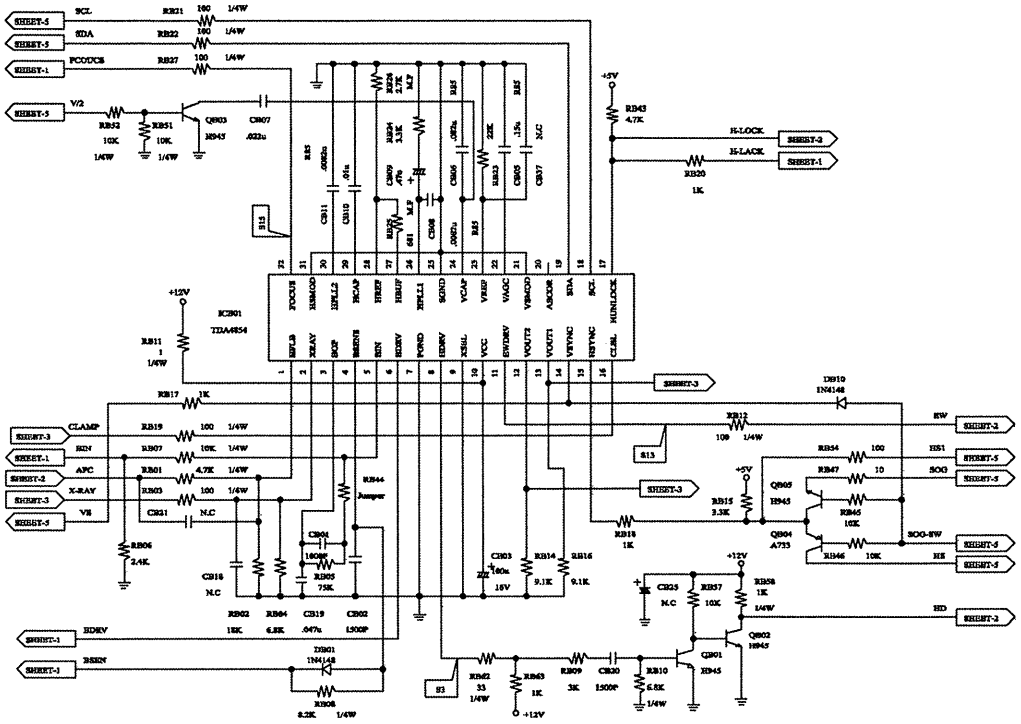
6.14.3. ICB01 pin13 (VOUT1) provides a DC level to CB05,RB23,CB06 as a V-Position control voltage. As long as pin13 DC level changed, V-Position is also changed.

6.14.4. Vertical Deflection Wave ***as figure S11***

Confidential – Do Not Copy

6.15. TDA4854 Circuit

The ICB01 (TDA4854) acts as a key component processing small signals for deflection circuits. The functions of TDA4854 include:



6.15.1. Synchro Processor

6.15.1-a. Capability to accept separate H/V(pin15, pin14) which could be selected by MCU via I2C control(pin18,19).

6.15.1-b. Status register with sync polarity, existence, locking states could be read by MCU via I2C.

Confidential – Do Not Copy

6.15.2. Horizontal part:

6.15.2-a. Wide self-locking range with 25 to 97KHz of HPLL1 to lock the HD frequency to H-sync input. The values of RB25(pin27) and CB09,RB27(pin28) decides the freerun frequency(25KHz)

6.15.2-b. The H-phase control by MCU via I2C is also done at the HPLL1 stage.

6.15.2-c. The HPLL2 (pin30) locks the horizontal deflection via AFC (pin1) and provides the functions of dynamic phase controls(Pin-Balance and Parallelogram, internal) control by MCU via I2C.

6.15.2-d. The I2C controlled Focus of Amplitude is output on pin32 and amplified to compensate the horizontal dynamic focus.

6.15.3. Vertical part:

6.15.3-a. The DC voltage of the V-ramp is output on pin12,13 to ICB02 to be the reference voltage of the amplifier.

6.15.3-b. Vertical parabola generator with I2C controlled amplitude, keystone, S-curve and cupid-bow output on pin31 to the horizontal deflection CKT to compensate the pincushion-like distortion.

6.15.3-c. Focus output on pin32 to be amplified to compensate the vertical dynamic focus.

6.15.3-d. Internal geometry tracking with V-Pos and V-Amp.

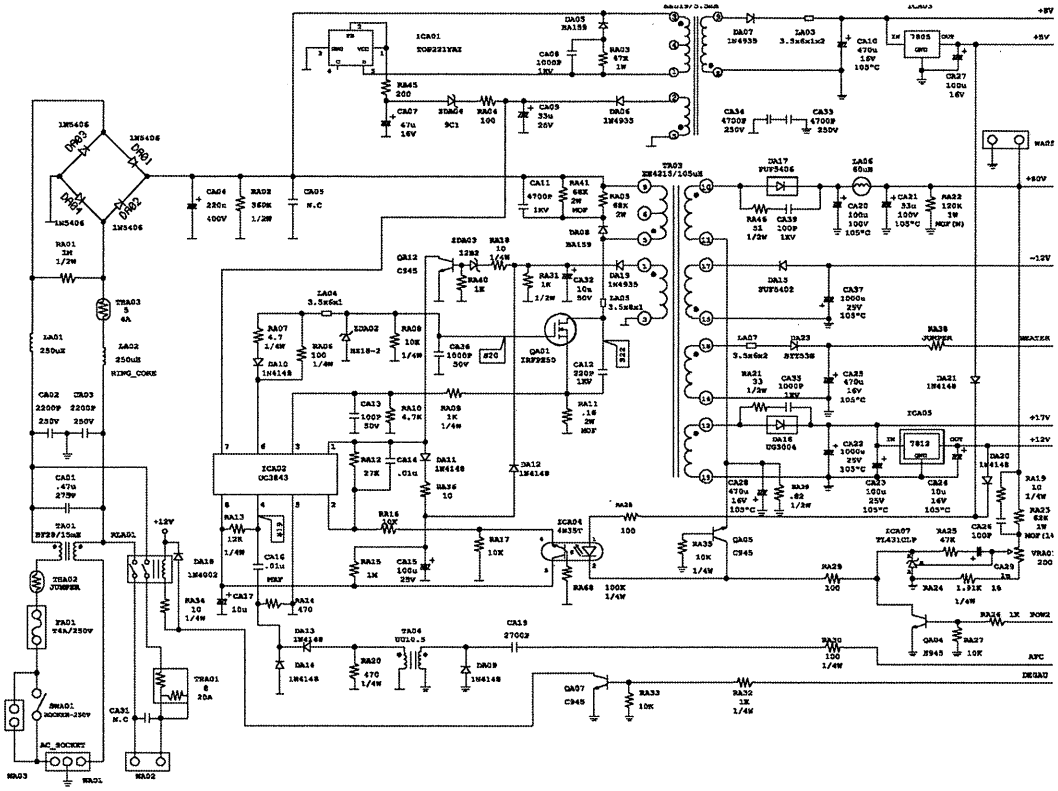
6.15.4. Others

6.15.4-a. HUNLOCK status on pin17 to protect H deflection CKT.

6.15.4-b. X-ray protection input on pin2.

Confidential – Do Not Copy

6.16. Power Supply Operation Theory



ICA01 and ICA02 consist of a Current Mode Switch Power Supply and provides +180V, +70V, +5V, +17V, -12V and Heater voltage.

6.16.1-a. ICA01 and TA02 are auxiliary power source. ICA01 consists of PWM and Power MOS with an internal oscillate frequency 100KHz and combines with TA02 to provide +5V output. The +17V is through TA02 pin2 and rectified by DA07 to provide ICA02 working voltage and is fed back through ZDA02 into pin C to get a stable output voltage.

6.16.1-b. ICA02, QA01 and TA03 are main power source. ICA02 uses PWM to drive QA01 and TA03 to generate each output voltage. The output voltage is fed back via +80V to ICA07 TL431, then coupled to ICA02 pin 2 via ICA04 4N35 to make +80V stable. TA04 accepts AFC signal to make Power Supply's working frequency synchronized with the horizontal frequency.

6.16.1-c. ZDA03 and DA12 consist of the over-voltage protection circuit. QA05, CA28,RA35 and RA39 consist of current-limited protection circuit.

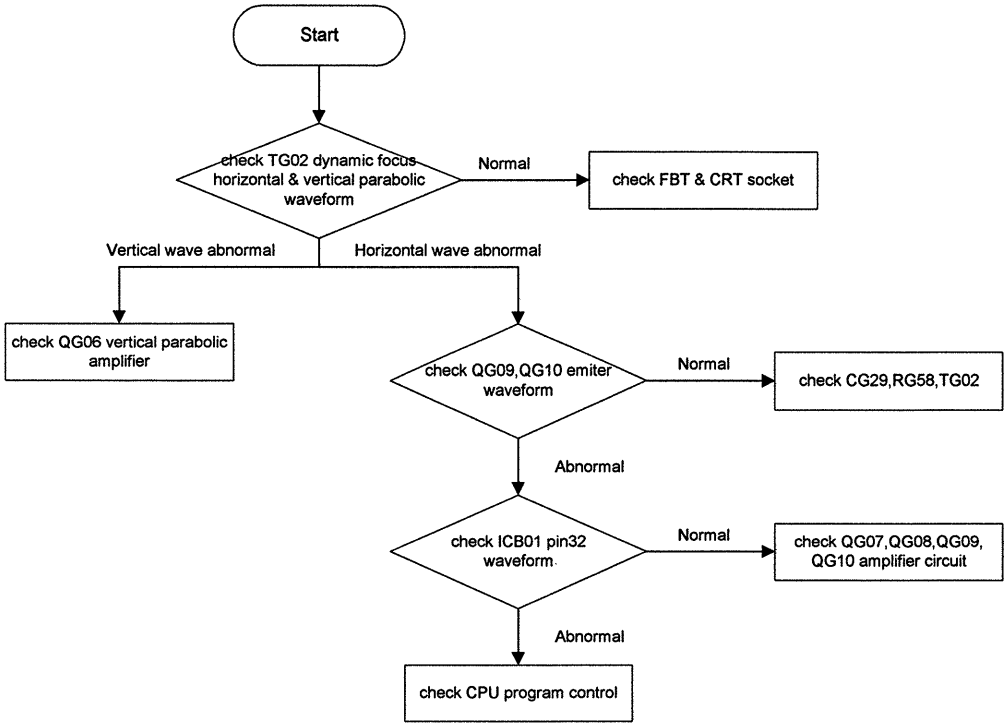
Confidential – Do Not Copy

6.16.1-d. When output voltage is much higher than normal value or the feed back voltage is abnormal, in order to get protection, the output at pin9 of TA03 raises to the level that ZDA03 is on to trigger QA12 that makes ICA02 pin1 grounded.. If the output is shortage or the output loading is abnormal, a current will flow through RA39 to generate a voltage drop to make QA05 on and turn off the output via the control of ICA04 and ICA02.

Confidential – Do Not Copy

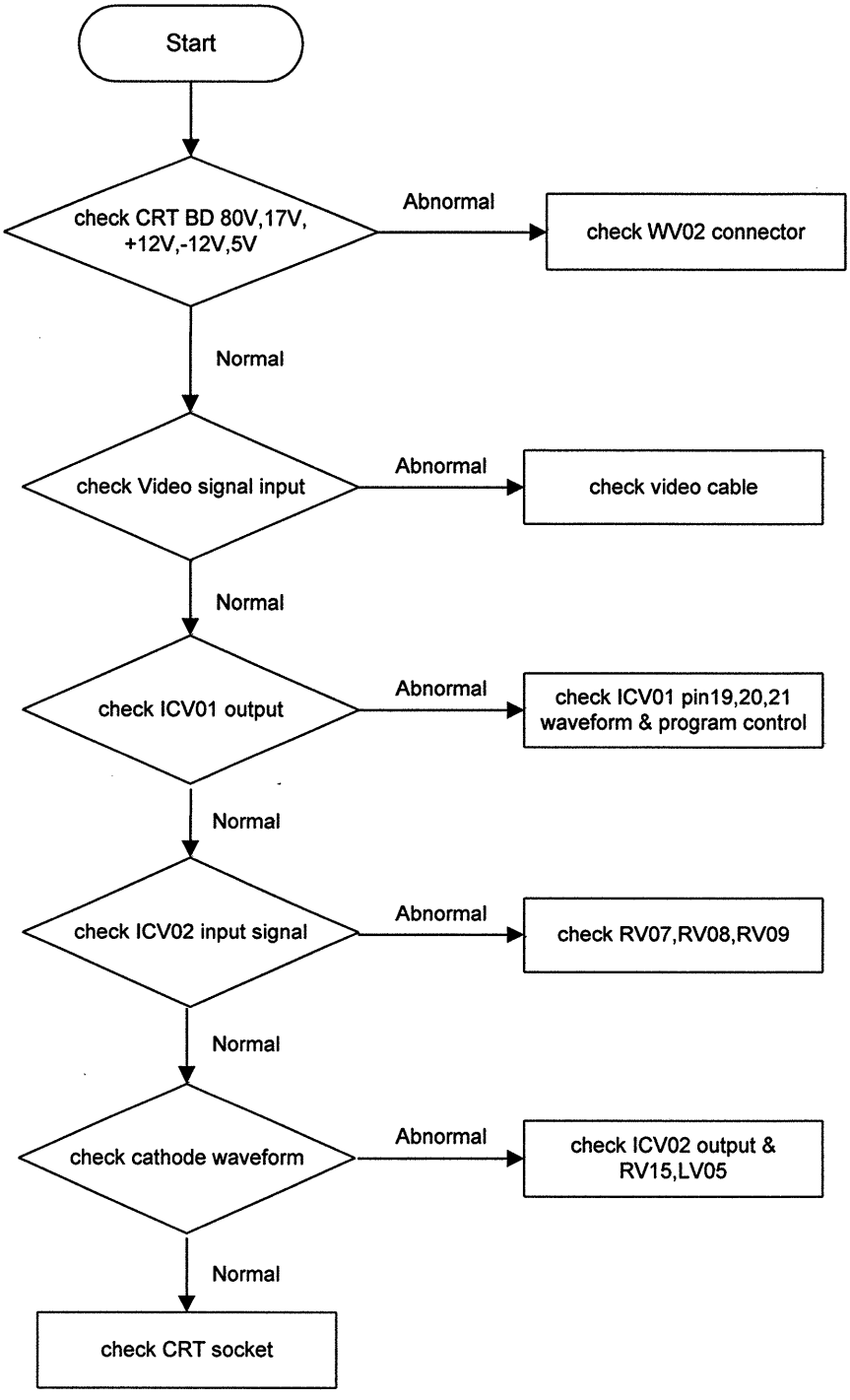
Chapter 7 Trouble Shooting

7.1. Dynamic Does Not Work



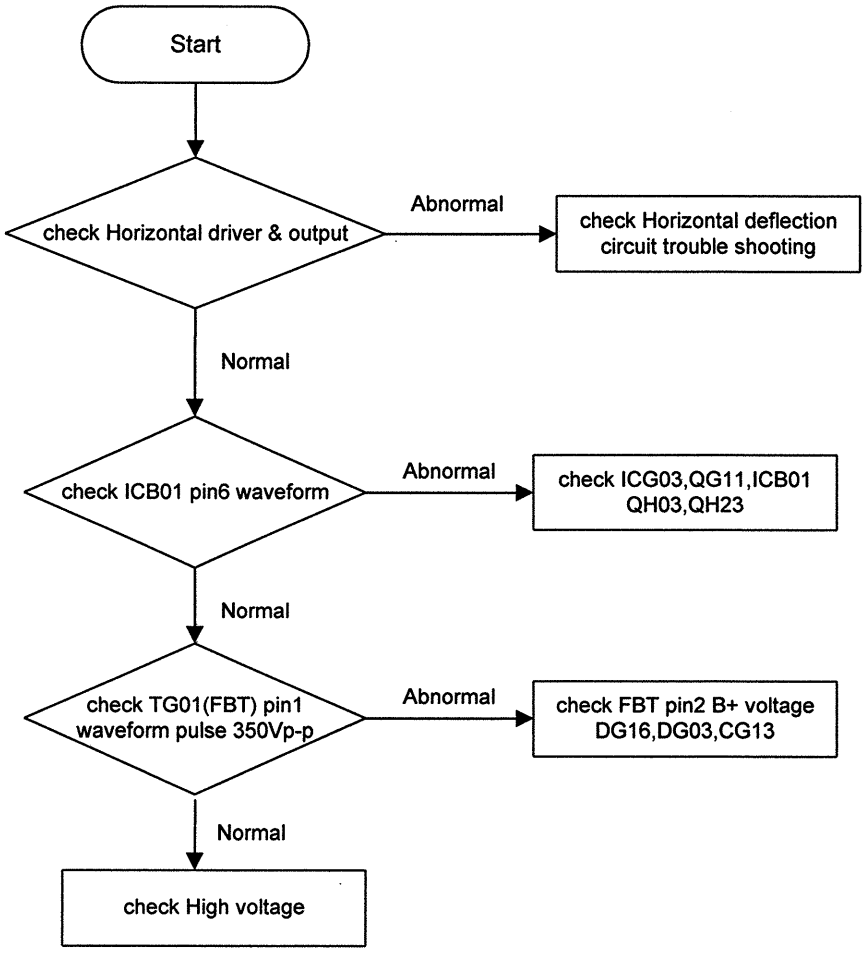
Confidential – Do Not Copy

7.2. Video Does Not Appear



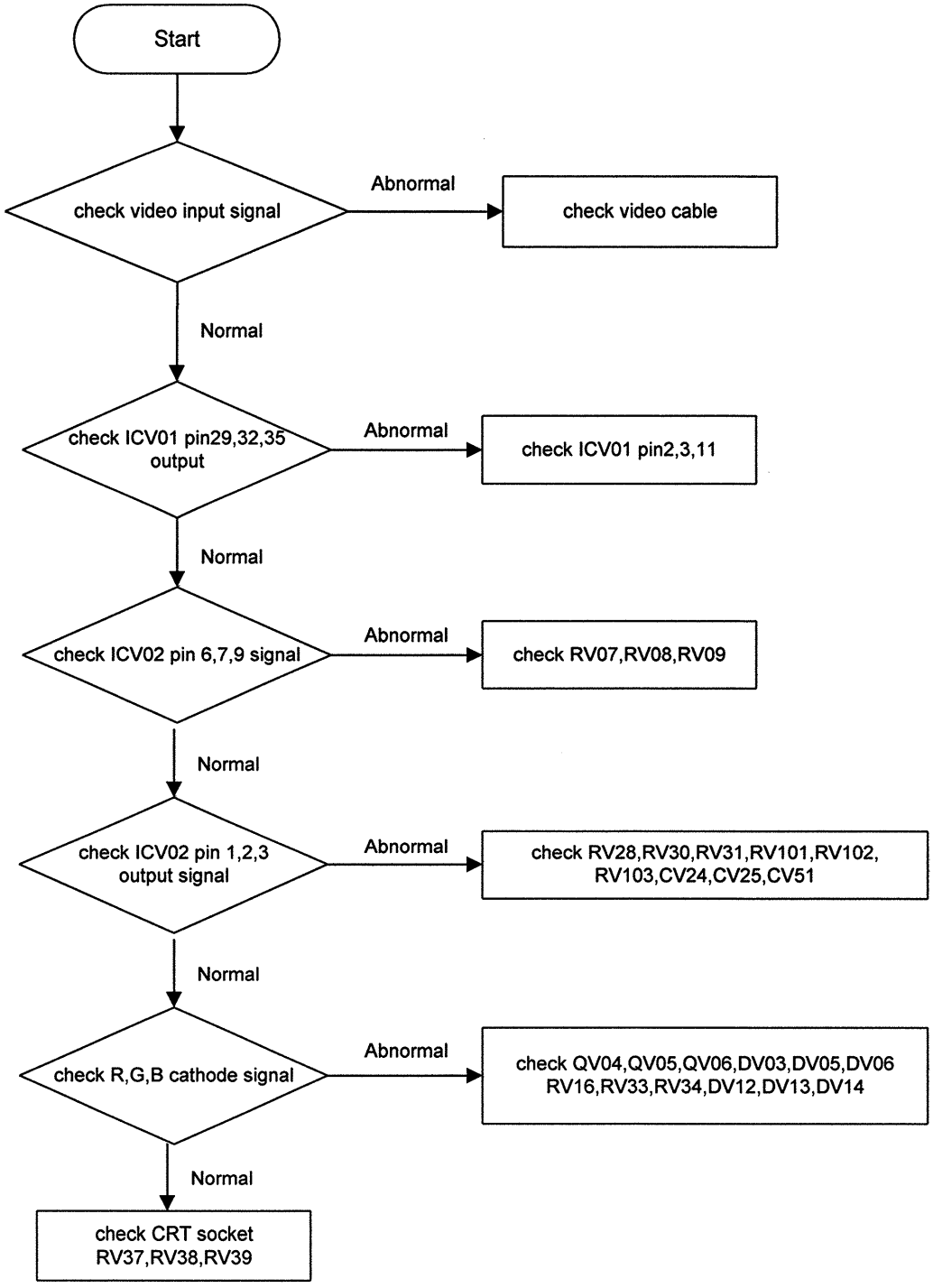
Confidential – Do Not Copy

7.3. High Voltage Generator Does Not Work



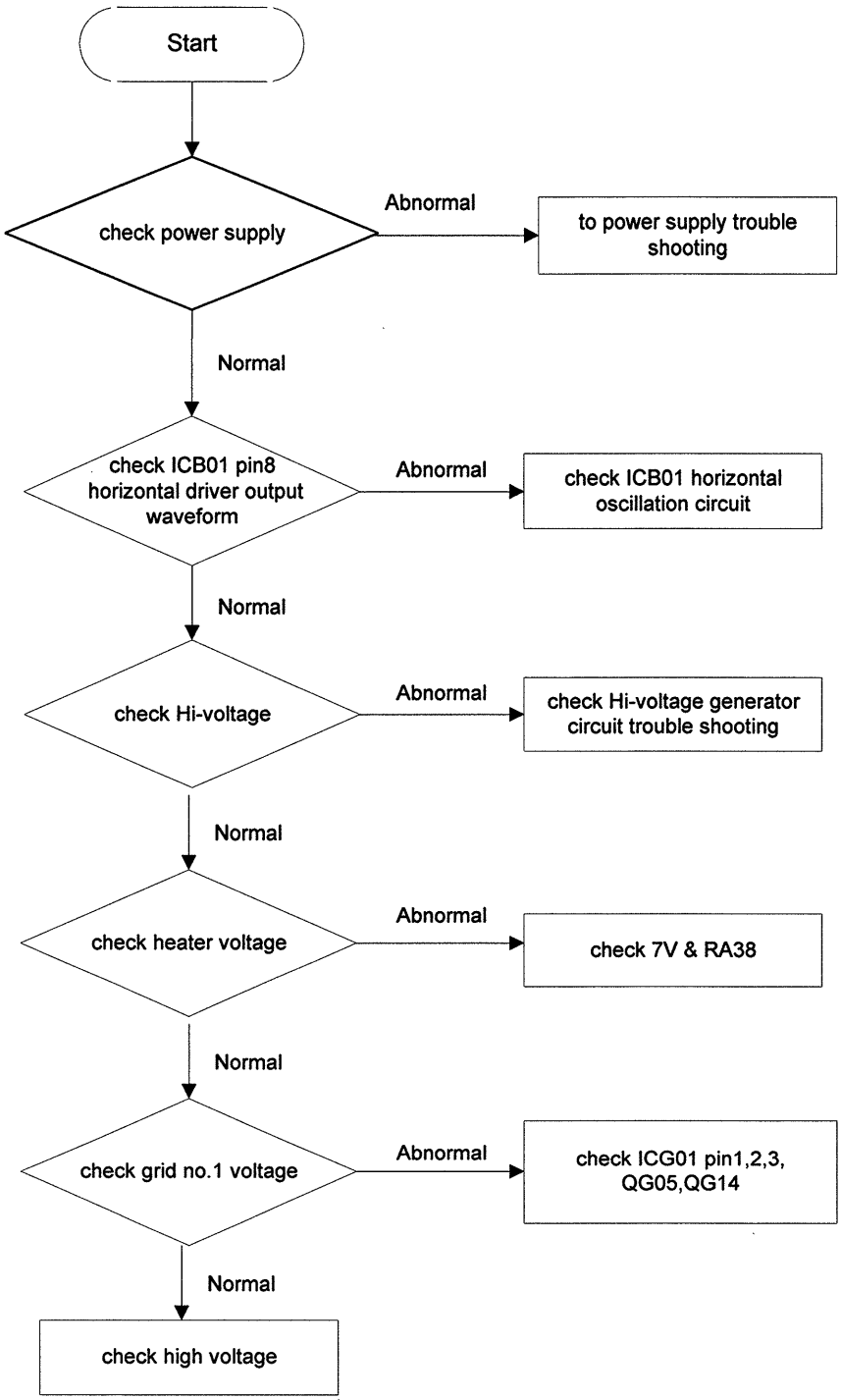
Confidential – Do Not Copy

7.4. Video No R, G, B Color



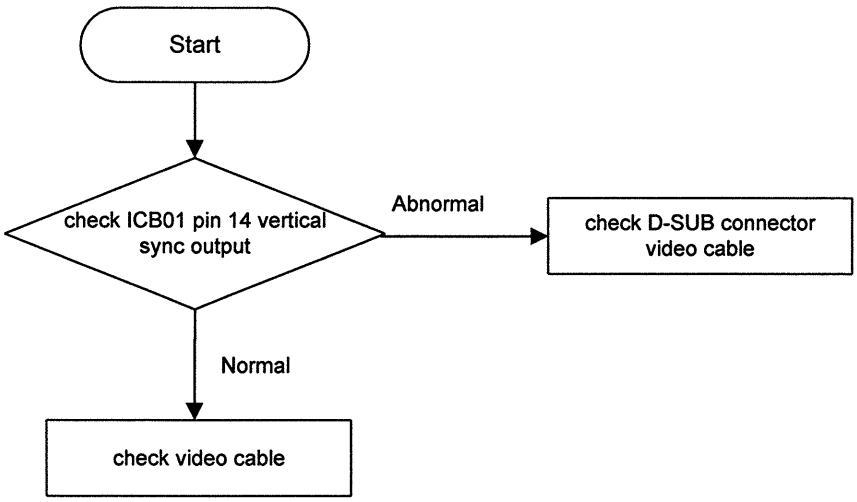
Confidential – Do Not Copy

7.5. Raster Does Not Appear

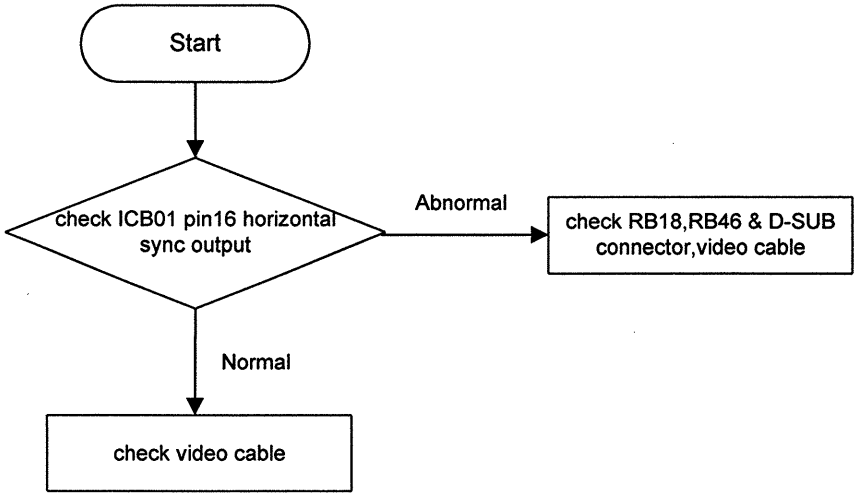


Confidential – Do Not Copy

7.6. Vertical Not Synchronous

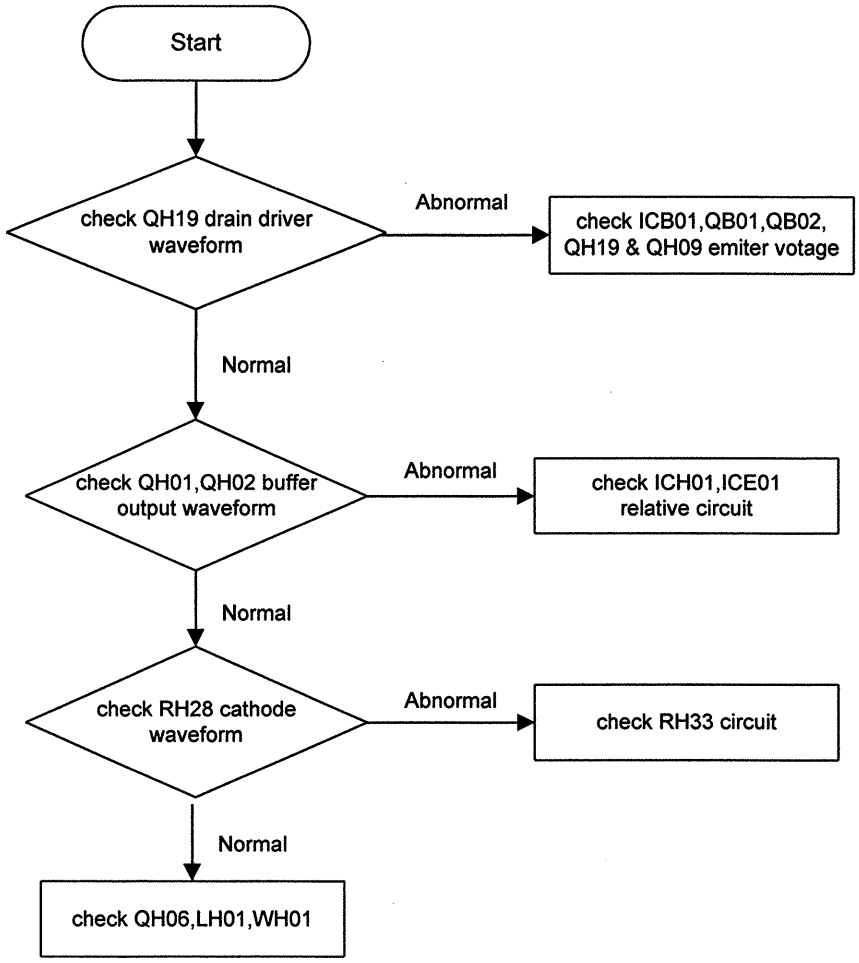


7.7. Horizontal Does not Synchronous



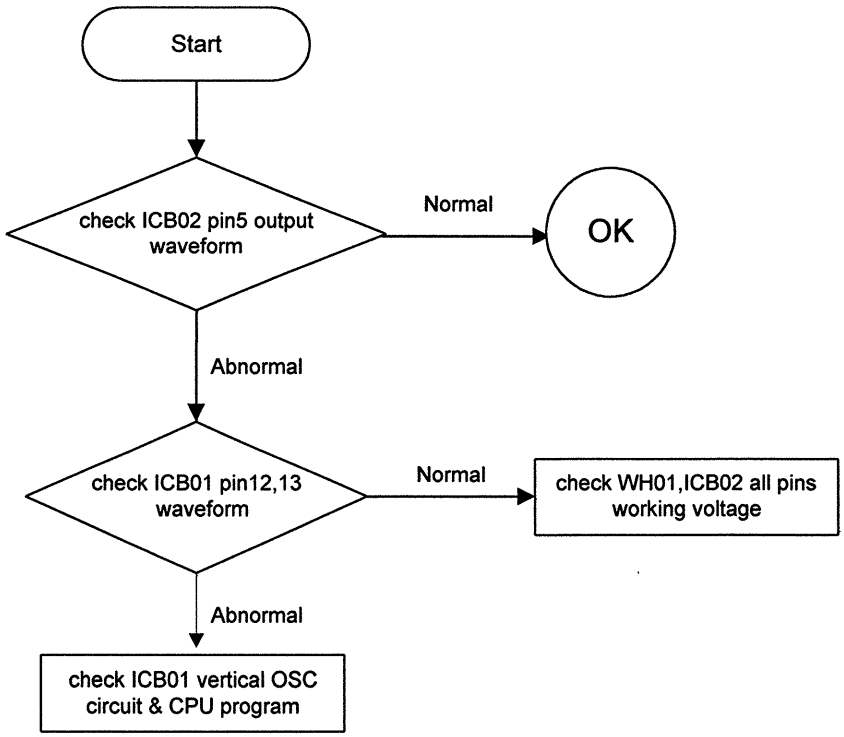
Confidential – Do Not Copy

7.8. Horizontal Deflection Does Not Work



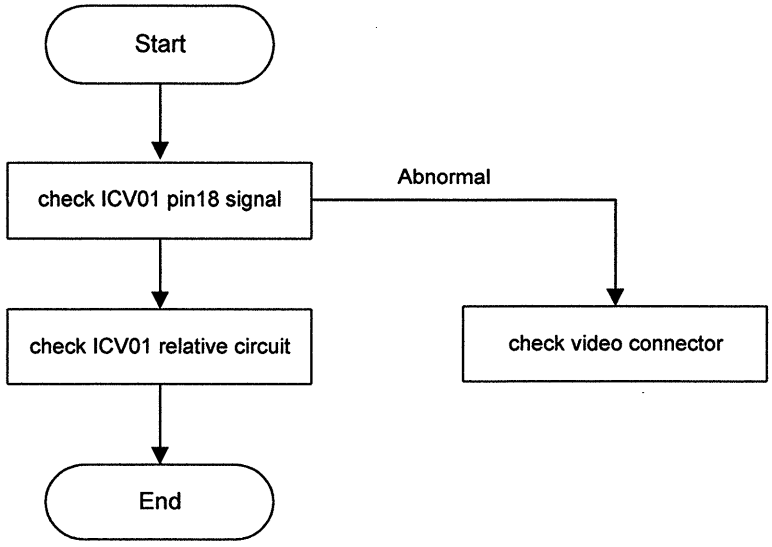
Confidential – Do Not Copy

7.9. Single Horizontal Line

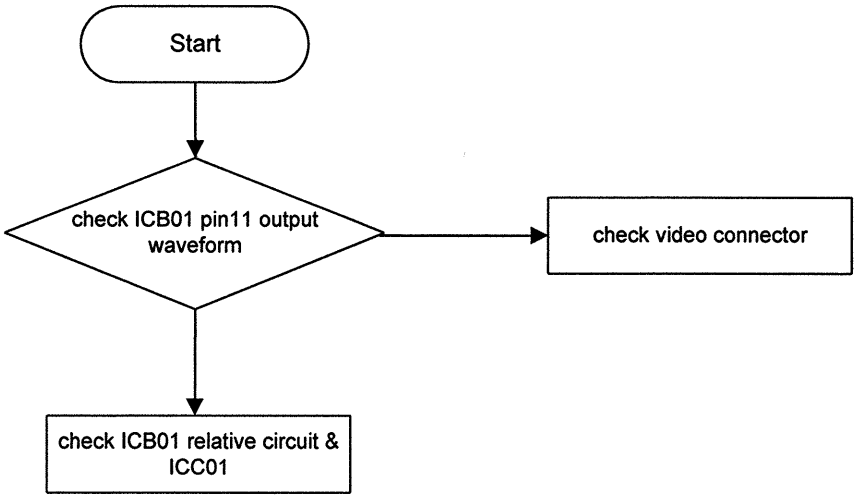


Confidential – Do Not Copy

7.10. Sync On Green Does Not Work

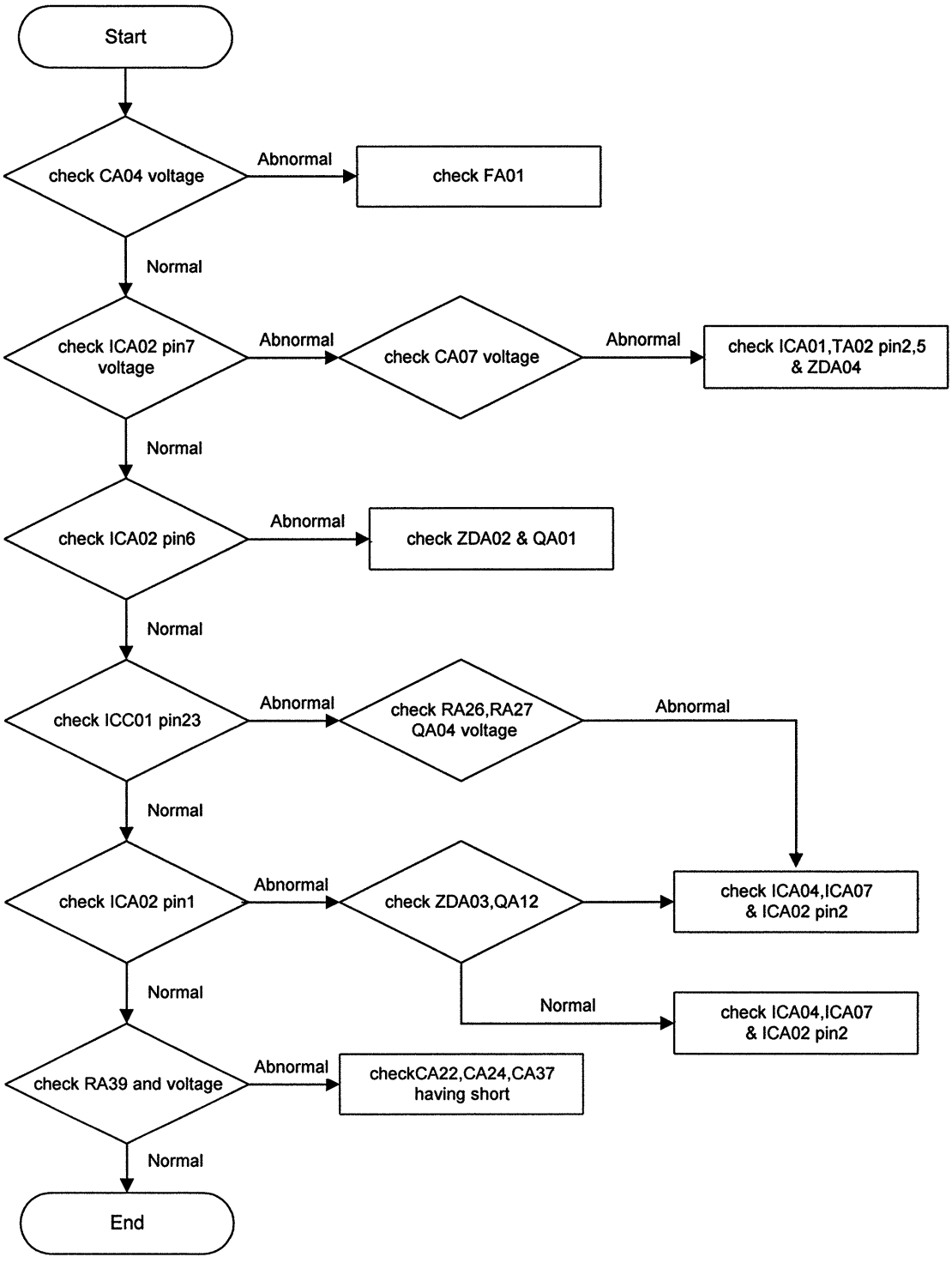


7.11. Pincushion & Distottion



Confidential – Do Not Copy

7.12.No Voltage Output



Confidential – Do Not Copy

Chapter 8 Alignment Process

8.1. Factory Adjustment Procedure

Input timing:1024x768 (H=60K,V=75Hz)
Pattern: Cross-Hatch

8.1.1. Turn ON the monitor with the [2] key keeping pressed for more than 4 seconds to enter the Preset-Adjust mode. (There should be an 'P' at the right-bottom corner of the On-Screen-Display).

8.1.2. E2PROM Initial Procedure:

8.1.2-a. Use the OSD controls to enter the " E2PROM INI ", and toggle it (push the [2] key)

8.1.2-b. Press button [1] toggle to the e2prom initial operation

8.1.2-c. Press button [2] toggle to exit control

8.1.3. Touch Heat Sink of DA17 and adjust VRA01 to make Voltage = 80±0.5V

8.1.4. Adjust VRG01 to make CRT High-Voltage = 25KV

8.1.5. Adjust VRH02 to make H-Size = 300±1 mm

8.1.6. Adjust VRH01 to make H-Center (raster) ±3 mm

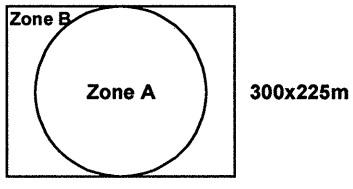
8.1.7. Short WG01 to make X-Ray Protection and Restart the monitor in Preset-Adjust mode

8.1.8. Use the On-Screen-Display Controls to adjust the ,"H-Position" ,"V-Size", "V-Position", "Pincushion", "Trapezoid", "Parallel", "P-Balance", "Rotation", "VLinr-Sym", "Vlinr-Center", "Hooking" to meet the Spec.:

- H-Position: ± 1.5mm
- V-Size: 225 ± 1.5mm
- V-Position: ± 1.5mm
- Pincushion: ≤ 1.5mm
- Trapezoid: ≤ 1.5mm
- Parallel: ≤ 1.5mm
- P-Balance: ≤ 1.5mm
- Rotation: ≤ 1.5mm

8.1.9. Jitter - Not allowed (Viewed at 45 cm)

8.1.10. Misconvergence -Zone A: 0.25mm; Zone B: 0.35mm



Confidential – Do Not Copy

8.2. Factory Preset Data Adjustment Procedure

Input timing: see attached
Pattern: Cross-Hatch

8.2.1. Turn ON the monitor with the [2] key keeping pressed for more than 4 seconds to enter the Preset-Adjust mode. (There should be an 'P' at the right-bottom corner of the On-Screen-Display).

8.2.2. For each timing list on attached table (except primary one <1024x768 H60K, V75Hz>), use the On-Screen-Display Controls to adjust the "H-Size", "H-Position"(video), "V-Size", "V-Position", "Pincushion", "Trapezoid", "Parallel", "P-balance", to meet the Spec.:

- H-Size: 300± 1.5mm
- H-Position: ± 1.5mm
- V-Size: 265 ± 1.5mm
- V-Position: ± 1.5mm
- Pincushion: ≤ 1.5mm
- Trapezoid: ≤ 1.5mm
- Parallel: ≤ 1.5mm
- P-Balance: ≤ 1.5mm

8.3. Color Adjustment Procedure

Input timing: 1024 x 768 (H=60K,V=75Hz)
Pattern: Center Block/Full White

8.3.1. Turn ON the monitor with the [2] key keeping pressed for more than 4 seconds to enter the Preset-Adjust mode. (There should be an 'P' at the right-bottom corner of the On-Screen-Display).

8.3.2. Cut Off Adjust:

8.3.2-a. Use the OSD Controls to adjust the "CONTRAST" to min.(00), "BRIGHTNESS" to max.(100), " SUB-BRI" to 50

8.3.2-b. Enter the "VIEWMATCH COLOR" submenu of the OSD Control

8.3.2-c. Select the "VIEWMATCH COLOR" and toggle it (push the Function key) to CUTOFF

8.3.2-d. Preset the RED,GREEN,BLUE to 0

8.3.2-e. Adjust the RED,GREEN,BLUE to obtain color temperature X=0.283±0.010,Y=0.297±0.010

8.3.2-f. Adjust G2 voltage to obtain raster brightness about ≤0.5FL

Confidential – Do Not Copy

8.3.3. Color Temperature Adjust:

8.3.3-a. Use the OSD Controls to adjust the "BRIGHTNESS" to 50, then the "CONTRAST" to 100.

8.3.3-b. Toggle the "VIEWMATCH COLOR" to 5000°K

8.3.3-c. Preset the RED,GREEN,BLUE

8.3.3-d. Adjust the RED,GREEN,BLUE to obtain color temperature X=0.346±0.015,Y=0.359±0.015

8.3.3-e. Repeat step b,c,d to adjust color temp. 6500K (X=0.313±0.015,Y=0.329±0.015) and 9300K (X=0.283±0.015,Y=0.297±0.015)

8.3.4. White Luminance Adjust

8.3.4-a. Center Block White Luminance:

- Use the OSD Controls to adjust the "CONTRAST" to 100 , "BRIGHTNESS" to 50, "ABL" to 50
- Toggle the "VIEWMATCH COLOR" to 9300°K
- Adjust the "SUB-CONT" to make the center block 48±3 FL

8.3.4-b. Full While Luminance:

- Use the OSD Controls to adjust the "CONTRAST" to 100 to, then the "BRIGHTNESS" to 50
- Toggle the "VIEWMATCH COLOR" to 9300°K
- Adjust the "ABL" to obtain luminance output 32±2 FL in the full white pattern

Confidential – Do Not Copy

Chapter 9 Spare Parts List

ITEM	LOCATION	PART NO.	DESCRIPTION	REMARK
1	DA17	0390-3003-0022	FAST DIODE FUF5406	
2	DG06	0390-3003-2052	FAST DIODE BYT53G T	
3	DG17	0390-5000-9132	GEN. DIODE BAV21 T	
4	DH06	0390-3004-8022	FAST DIODE FUF5408 T	
5	DH08	0390-2000-5190	DAMPER DIODE DD84RC N-F	
6	ICA01	0430-4004-0230	IC TOP221Y TO-220 3PIN	
7	ICA02	0430-7000-7107	IC UC3843 DIP 8PIN	
8	ICA04	0430-7000-1110	IC 4N35 DIP 6PIN	
9	ICB01	0430-4005-3409	IC TDA4854/V2 SDIP 32PIN	
10	ICB02	0430-4001-7107	IC TDA8172 DIP 7PIN	
11	ICC01	0430-5002-6142	IC NT68P62 DIP 40PIN	
12	ICG01	0430-4000-1104	IC LM358 DIP-8	
13	ICV01	0430-4004-9402	IC M52743BSP SDIP 36PIN	
14	ICV02	0430-4006-0104	IC LM2435 DIP 9PIN	
15	ICV05	0430-7003-9141	IC D1642 DIP 16PIN V3.0	
16	QA01	0420-1001-2501	POWER MOS IRFPE50 TO-3P	
17	QG03	0420-1001-4401	POWER MOS IRF730 TO-220	
18	QG06	0410-4000-1111	TRANSISTOR BF420 TO-92 T	
19	QG07	0410-0000-1109	TRANSISTOR 2SA733P TO-92 T	
20	QG08	0410-4000-3105	TRANSISTOR BF422 TO-92 T	
21	QG09	0410-6000-1311	TRANSISTOR BD139 TO-126	
22	QG10	0410-6000-2311	TRANSISTOR BD140 TO-126	
23	QH06	0410-2001-3516	TRANSISTOR 2SC5440 TO-3P	
24	QH09	0410-6000-1311	TRANSISTOR BD139 TO-126	
25	QH14	0420-1000-2407	POWER MOS IRF640 TO-220	
26	QH19	0420-1000-1401	POWER MOS IRF630 TO-220	
27	QH22	0420-1001-5401	POWER MOS IRF740 TO-220 3PIN	
28	RLH01	0251-1210-0016	RELAY 1POLES 240V/10A/12 Vdc DT	
29	ZDA02	0400-1751-2000	ZENER 18-2 17.5-18.3 1/2W	

Confidential – Do Not Copy

Chapter 10 Critical Parts List

ITEM	LOACTION	PART NO	DESCRIPTION	REMARK
1		0210-0170-1255	CRT 17" M41LPE21X12 MIT.	
2	ASCH05	0330-1700-0920	DEGAUSSING 17" 16ohm 0.45x95Ts	
3	CA01	0122-0474-2702	P/C X2 0.47uF 275V K B	
4	CA02	0122-1222-2522	D/C Y 2200PF 250V M B	
5	CA03	0122-1222-2522	D/C Y 2200PF 250V M B	
6	CA04	0101-1221-4003	E/C GEN. 220uF 400V 85' S	
7	CA33	0122-1472-2522	D/C Y 4700PF 250V M N-F	
8	CA34	0122-1472-2522	D/C Y 4700PF 250V M N-F	
9	FA01	0180-4402-5201	FUSE T-L 250V 4A 5x20 GLASS	
10	ICA04	0430-7000-1110	IC 4N35 DIP 6PIN	
11	LA01	0360-1000-0010	RING CORE L:250uH 4A	
12	LA02	0360-1000-0010	RING CORE L:250uH 4A	
13	QA01	0420-1001-2501	POWER MOS IRFPE50 TO –3P	
14	RA01	0130-1004-1250	RES. CF 1.0Mohm 1/2W J A	
15	RLA01	0252-1250-2012	RELAY 2POLES 250V/5A/12Vdc DT	
16	TA02	0350-0419-0030	X'FMR EEL19 5.5mH AT1099DA	
17	TA03	0350-0242-0050	X'FMR EE4215 105uH	
18	TA04	0353-0600-0010	X'FMR SYNC UU 10.5 1.75-1.75mH	
19	TG01	0480-0000-0070	F.B.T. 26.5KV 3000PF (CF1043C)	
20	WA01	0262-0000-0012	AC SOCKET 0714C PCB TYPE	
21	WA02	0451-1000-0294	WAFER 10mm 2P WHITE	

Confidential – Do Not Copy

Chapter 11 Parts List

11.1. 3017-0082-0140 TCO BD

ITEM	LOC.	PART NO.	DESCRIPTION	REMARK
1	C01	0101-1470-1211	E/C GEN. 47uF 16V 105' F	
2	C02	0101-1100-1511	E/C GEN. 10uF 50V 105' F	
3	C03	0101-1101-1211	E/C GEN. 100uF 16V 105' F	
4	C04	0111-1104-5102	C/C DISK 0.1uF 50V Y5V F-K	
5	C05	0101-1109-2011	E/C GEN. 1.0uF 100V 105' F	
6	C06	0111-1103-5122	C/C DISK 0.01uF 50V Z5U F-K	
7	D01	0390-5000-1052	GEN. DIODE 1N4148 T	
8	D02	0390-5000-1052	GEN. DIODE 1N4148 T	
9	PCB7	0174-3040-0102	PCB ADD BD K1 128*14*1.6 S	
10	Q01	0420-1000-8104	MOSFET 2N7000 TO-92 T	
11	Q02	0410-4000-1111	TRANSISTOR BF420 TO-92 T	
12	Q03	0410-4000-1111	TRANSISTOR BF420 TO-92 T	
13	Q04	0410-4000-2111	TRANSISTOR BF421 TO-92 T	
14	R02	0130-1005-1850	RES. CF 10Mohm 1/8W J A	
15	R03	0130-4703-1850	RES. CF 470Kohm 1/8W J A	
16	R04	0130-2204-1850	RES. CF 2.2Mohm 1/8W J A	
17	R05	0130-5101-1850	RES. CF 5.1Kohm 1/8W J A	
18	R06	0130-4701-1850	RES. CF 4.7Kohm 1/8W J A	
19	R07	0130-2702-1450	RES. CF 27Kohm 1/4W J A	
20	R08	0130-1102-1850	RES. CF 11Kohm 1/8W J A	
21	R09	0130-1803-1850	RES. CF 180Kohm 1/8W J A	
22	R10	0130-6800-1850	RES. CF 680ohm 1/8W J A	
23	R11	0130-1000-1850	RES. CF 100ohm 1/8W J A	
24	R12	0130-1004-1850	RES. CF 1.0Mohm 1/8W J A	
25	R13	0130-1802-1850	RES. CF 18Kohm 1/8W J A	
26	W01	0451-2500-0314	WAFER 2.50mm 3P 180' Kink	
27	W02	0451-2500-0214	WAFER 2.50mm 2P 180' Kink	
28	ZD01	0400-1261-2000	ZENER 12B2 12.6-13.1V 1/2W	

Confidential – Do Not Copy

11.2. 3017-0142-0156 DISPLAY BD

ITEM	LOC.	PART NO.	DESCRIPTION	REMARK
1	LEDD01	0440-5000-0020	LED L-59GYW 5	
2	PCB5	0170-1740-0120	PCB DISPLAY BD V0 118x36x1.6t PT775	
3	RD01	0130-3309-1850	RES. CF 33ohm 1/8W J A	
4	RD02	0130-3309-1850	RES. CF 33ohm 1/8W J A	
5	RD03	0130-4701-1450	RES. CF 4.7Kohm 1/4W J A	
6	RD04	0130-1802-1450	RES. CF 18Kohm 1/4W J A	
7	RD05	0130-1102-1850	RES. CF 11Kohm 1/8W J A	
8	RD06	0130-7501-1850	RES. CF 7.5Kohm 1/8W J A	
9	SWD01	0220-7020-0167	SW TACTILE 6*6mm 4P	
10	SWD02	0220-7020-0167	SW TACTILE 6*6mm 4P	
11	SWD03	0220-7020-0167	SW TACTILE 6*6mm 4P	
12	SWD04	0220-7020-0167	SW TACTILE 6*6mm 4P	
13	WD01	0460-1104-0040	WH XH4P-SCN4P 1007#24 230mm	

Confidential – Do Not Copy

11.3. 3017-0252-0151 VIDEO BD

ITEM	LOC.	PART NO.	DESCRIPTION	REMARK
1	CV01	0101-1100-1511	E/C GEN. 10uF 50V 105' F	
2	CV02	0101-1100-1511	E/C GEN. 10uF 50V 105' F	
3	CV03	0101-1100-1511	E/C GEN. 10uF 50V 105' F	
4	CV04	0101-1101-1211	E/C GEN. 100uF 16V 105' F	
5	CV05	0101-1470-1211	E/C GEN. 47uF 16V 105' F	
6	CV06	0101-1109-1511	E/C GEN. 1.0uF 50V 105'F	
7	CV07	0101-1221-1211	E/C GEN. 220uF 16V 105' F	
8	CV08	0111-3822-5115	C/M Multi 8200PF 50V X7R 0805	
9	CV09	0111-3101-5105	C/M Multi 100PF 50V NPO 0805	
10	CV10	0111-3100-5105	C/M Multi 10PF 50V NPO 0805	
11	CV11	0111-3100-5105	C/M Multi 10PF 50V NPO 0805	
12	CV13	0111-3100-5105	C/M Multi 10PF 50V NPO 0805	
13	CV14	0111-1103-5222	C/C DISK 0.01uF 500V Z5U F-K	
14	CV15	0111-2330-5202	C/C DISK 33PF 500V NPO F-K	
15	CV17	0101-1101-2012	E/C GEN. 100uF 100V 105' K	
16	CV20	0111-3103-5125	C/M Multi 0.01uF 50V Z5U 0805	
17	CV21	0111-3470-5105	C/M Multi 47PF 50V NPO 0805	
18	CV22	0111-3470-5105	C/M Multi 47PF 50V NPO 0805	
19	CV23	0111-3470-5105	C/M Multi 47PF 50V NPO 0805	
20	CV24	0111-3560-5105	C/M Multi 56PF 50V NPO 0805	
21	CV25	0111-3560-5105	C/M Multi 56PF 50V NPO 0805	
22	CV26	0101-3109-2311	E/C N-P. 1uF 250V 105' F	
23	CV27	0101-3109-2311	E/C N-P. 1uF 250V 105' F	
24	CV28	0101-3109-2311	E/C N-P. 1uF 250V 105' F	
25	CV29	0111-1103-5222	C/C DISK 0.01uF 500V Z5U F-K	
26	CV30	0101-1109-2311	E/C GEN. 1.0uF 250V 105' F	
27	CV31	0101-1109-2311	E/C GEN. 1.0uF 250V 105' F	
28	CV32	0101-1109-2311	E/C GEN. 1.0uF 250V 105' F	
29	CV34	0101-1100-1511	E/C GEN. 10uF 50V 105' F	
30	CV35	0111-1103-5222	C/C DISK 0.01uF 500V Z5U F-K	
31	CV37	0111-3104-5125	C/M Multi 0.1uF 50V Z5U 0805	
32	CV38	0111-1103-2322	C/C DISK 0.01uF 2KV Z5U F-K	
33	CV38W	0460-2001-0200	WH 1015#18 25mm	
34	CV39	0120-3472-6331	P/C PPN 0.0047uF 630V J F-K	
35	CV40	0111-3104-5125	C/M Multi 0.1uF 50V Z5U 0805	
36	CV41	0101-1101-1211	E/C GEN. 100uF 16V 105' F	
37	CV42	0111-3104-5125	C/M Multi 0.1uF 50V Z5U 0805	
38	CV43	0101-1101-1211	E/C GEN. 100uF 16V 105' F	
39	CV48	0111-3101-5105	C/M Multi 100PF 50V NPO 0805	
40	CV49	0111-3220-5105	C/M Multi 22PF 50V NPO 0805	
41	CV50	0111-3104-5124	C/M Multi 0.1uF 50V Z5U 1206	
42	CV51	0111-3560-5105	C/M Multi 56PF 50V NPO 0805	
43	CV52	0111-2509-5202	C/C DISK 5.0PF 500V NPO F-K	
44	CV55	0111-3331-5105	C/M Multi 330PF 50V NPO 0805	
45	CV56	0101-1100-1511	E/C GEN. 10uF 50V 105' F	
46	CV58	0111-3331-5105	C/M Multi 330PF 50V NPO 0805	
47	CV59	0111-2509-5202	C/C DISK 5.0PF 500V NPO F-K	
48	CV60	0111-2509-5202	C/C DISK 5.0PF 500V NPO F-K	
49	CV64	0111-3104-5125	C/M Multi 0.1uF 50V Z5U 0805	
50	CV65	0111-3104-5125	C/M Multi 0.1uF 50V Z5U 0805	

Confidential – Do Not Copy

ITEM	LOC.	PART NO.	DESCRIPTION	REMARK
51	CV66	0111-3104-5125	C/M Multi 0.1uF 50V Z5U 0805	
52	CV68	0101-1100-1511	E/C GEN. 10uF 50V 105' F	
53	CV69	0101-1221-1211	E/C GEN. 220uF 16V 105' F	
54	CV70	0111-3102-5105	C/M Multi 1000PF 50V NPO 0805	
55	CV71	0101-3229-1511	E/C N-P 2.2uF 50V 105' F	
56	CV72	0101-1479-1511	E/C GEN. 4.7uF 50V 105' F	
57	CV76	0111-3104-5125	C/M Multi 0.1uF 50V Z5U 0805	
58	CV77	0111-3224-5124	C/M Multi 0.22uF 50V Z5U 1206	
59	CV78	0111-3472-5115	C/M Multi 4700PF 50V X7R 0805	
60	DV01	0390-5000-1052	GEN. DIODE 1N4148 T	
61	DV02	0390-5000-1052	GEN. DIODE 1N4148 T	
62	DV03	0390-5000-9132	GEN. DIODE BAV21 T	
63	DV04	0390-5000-3022	GEN. DIODE 1N4002F T	
64	DV05	0390-5000-9132	GEN. DIODE BAV21 T	
65	DV06	0390-5000-9132	GEN. DIODE BAV21 T	
66	DV07	0390-5000-1052	GEN. DIODE 1N4148 T	
67	DV08	0390-5000-1052	GEN. DIODE 1N4148 T	
68	DV09	0390-5000-1052	GEN. DIODE 1N4148 T	
69	DV10	0390-5000-1053	GEN. DIODE 1N4148 SMD	
70	DV12	0390-5000-1052	GEN. DIODE 1N4148 T	
71	DV13	0390-5000-1052	GEN. DIODE 1N4148 T	
72	DV14	0390-5000-1052	GEN. DIODE 1N4148 T	
73	DV15	0390-5000-1052	GEN. DIODE 1N4148 T	
74	DV16	0390-5000-1052	GEN. DIODE 1N4148 T	
75	DV20	0390-5000-1052	GEN. DIODE 1N4148 T	
76	ICV01	0430-4004-9402	IC M52743BSP SDIP 36PIN	
77	ICV02	0430-4006-0104	IC LM2435 DIP 9PIN	
78	ICV02H	1712-0400-0130	HEAT SINK 60.5Wx15Tx28.5H AT897-1	
79	ICV02S	1724-3503-1202	SCREW PTAN M3.0x12L Zn-Cc	
80	ICV05	0430-7003-9141	IC D1642 DIP 16PIN V3.0	
81	ICV06	0430-4000-6104	IC LM324N DIP-14	
82	LV01	0344-2280-0601	PEAKING COIL 0.22uH 1/4W K A-T	
83	LV02	0344-2280-0601	PEAKING COIL 0.22uH 1/4W K A-T	
84	LV03	0344-2280-0601	PEAKING COIL 0.22uH 1/4W K A-T	
85	LV04	0344-3390-0601	PEAKING COIL 3.3uH 1/4W K A-T	
86	LV05	0230-1259-0000	JUMPER WIRE 12.5*0.6mm	
87	LV06	0370-0000-1210	FERRITE CORE A6 RH 3.5x9x0.8-T52	
88	LV10	0370-0000-1110	FERRITE CORE W8 R6H 6x10 2 1/2 T	
89	LV11	0130-4708-1450	RES. CF 4.7ohm 1/4W J A	
90	LV12	0130-3309-1450	RES. CF 33ohm 1/4W J A	
91	LV13	0370-0000-1210	FERRITE CORE A6 RH 3.5x9x0.8-T52	
92	LV14	0370-0000-1210	FERRITE CORE A6 RH 3.5x9x0.8-T52	
93	LV15	0344-3390-0601	PEAKING COIL 3.3uH 1/4W K A-T	
94	LV16	0370-0000-1210	FERRITE CORE A6 RH 3.5x9x0.8-T52	
95	LV17	0370-0000-1210	FERRITE CORE A6 RH 3.5x9x0.8-T52	
96	PCB2	0170-1440-0171	PCB VIDEO BD V0 150x120x1.6t LM324:ICV06	
97	QV03	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	
98	QV04	0410-4000-3111	TRANSISTOR BF422 TO-92 T	
99	QV05	0410-4000-3111	TRANSISTOR BF422 TO-92 T	
100	QV06	0410-4000-3111	TRANSISTOR BF422 TO-92 T	

Confidential – Do Not Copy

ITEM	LOC.	PART NO.	DESCRIPTION	REMARK
101	RV01	0130-7509-1859	RES. CF 75ohm 1/8W J 1206	
102	RV02	0130-7509-1859	RES. CF 75ohm 1/8W J 1206	
103	RV03	0130-7509-1859	RES. CF 75ohm 1/8W J 1206	
104	RV04	0130-4700-1859	RES. CF 470ohm 1/8W J 1206	
105	RV05	0130-1000-1859	RES. CF 100ohm 1/8W J 1206	
106	RV06	0130-1800-1859	RES. CF 180ohm 1/8W J 1206	
107	RV07	0130-1000-1859	RES. CF 100ohm 1/8W J 1206	
108	RV08	0130-1000-1859	RES. CF 100ohm 1/8W J 1206	
109	RV09	0130-1000-1859	RES. CF 100ohm 1/8W J 1206	
110	RV10	0130-4709-1859	RES. CF 47ohm 1/8W J 1206	
111	RV101	0130-1009-1859	RES. CF 10ohm 1/8W J 1206	
112	RV102	0130-1009-1859	RES. CF 10ohm 1/8W J 1206	
113	RV103	0130-1009-1859	RES. CF 10ohm 1/8W J 1206	
114	RV105	0130-4301-1859	RES. CF 4.3Kohm 1/8W J 1206	
115	RV109	0130-3309-1859	RES. CF 33ohm 1/8W J 1206	
116	RV11	0130-4709-1859	RES. CF 47ohm 1/8W J 1206	
117	RV114	0130-3309-1859	RES. CF 33ohm 1/8W J 1206	
118	RV115	0130-3309-1859	RES. CF 33ohm 1/8W J 1206	
119	RV116	0130-3309-1859	RES. CF 33ohm 1/8W J 1206	
120	RV12	0130-3900-1859	RES. CF 390ohm 1/8W J 1206	
121	RV13	0130-3900-1859	RES. CF 390ohm 1/8W J 1206	
122	RV14	0130-3900-1859	RES. CF 390ohm 1/8W J 1206	
123	RV15	0130-2209-1859	RES. CF 22ohm 1/8W J 1206	
124	RV16	0130-1803-1450	RES. CF 180Kohm 1/4W J A	
125	RV17	0130-1003-1859	RES. CF 100Kohm 1/8W J 1206	
126	RV18	0130-1501-1450	RES. CF 1.5Kohm 1/4W J A	
127	RV22	0130-1000-1859	RES. CF 100ohm 1/8W J 1206	
128	RV23	0130-1000-1859	RES. CF 100ohm 1/8W J 1206	
129	RV24	0130-1501-1859	RES. CF 1.5Kohm 1/8W J 1206	
130	RV28	0130-3309-1450	RES. CF 33ohm 1/4W J A	
131	RV29	0130-2201-1859	RES. CF 2.2Kohm 1/8W J 1206	
132	RV30	0130-3309-1450	RES. CF 33ohm 1/4W J A	
133	RV31	0130-3309-1450	RES. CF 33ohm 1/4W J A	
134	RV32	0111-3104-5124	C/M Multi 0.1uF 50V Z5U 1206	
135	RV33	0130-1803-1450	RES. CF 180Kohm 1/4W J A	
136	RV34	0130-1803-1450	RES. CF 180Kohm 1/4W J A	
137	RV35	0130-5600-1859	RES. CF 560ohm 1/8W J 1206	
138	RV36	0130-3909-1450	RES. CF 39ohm 1/4W J A	
139	RV37	0130-3909-1450	RES. CF 39ohm 1/4W J A	
140	RV38	0130-3909-1450	RES. CF 39ohm 1/4W J A	
141	RV42	0130-1502-1859	RES. CF 15Kohm 1/8W J 1206	
142	RV43	0130-1002-1859	RES. CF 10Kohm 1/8W J 1206	
143	RV44	0130-2203-1859	RES. CF 220Kohm 1/8W J 1206	
144	RV45	0130-1000-1859	RES. CF 100ohm 1/8W J 1206	
145	RV46	0130-2203-1859	RES. CF 220Kohm 1/8W J 1206	
146	RV47	0130-2203-1859	RES. CF 220Kohm 1/8W J 1206	
147	RV53	0130-3302-1450	RES. CF 33Kohm 1/4W J A	
148	RV54	0130-3302-1450	RES. CF 33Kohm 1/4W J A	
149	RV55	0130-3302-1450	RES. CF 33Kohm 1/4W J A	
150	RV56	0130-1004-1859	RES. CF 1.0Mohm 1/8W J 1206	

Confidential – Do Not Copy

ITEM	LOC.	PART NO.	DESCRIPTION	REMARK
151	RV57	0130-1004-1859	RES. CF 1.0Mohm 1/8W J 1206	
152	RV58	0130-1004-1859	RES. CF 1.0Mohm 1/8W J 1206	
153	RV59	0130-1203-1859	RES. CF 120Kohm 1/8W J 1206	
154	RV60	0130-1203-1859	RES. CF 120Kohm 1/8W J 1206	
155	RV61	0130-1203-1859	RES. CF 120Kohm 1/8W J 1206	
156	RV62	0130-1003-1250	RES. CF 100Kohm 1/2W J A	
157	RV63	0130-1001-1250	RES. CF 1.0Kohm 1/2W J A	
158	RV65	0130-1500-1859	RES. CF 150ohm 1/8W J 1206	
159	RV66	0130-4700-1859	RES. CF 470ohm 1/8W J 1206	
160	RV67	0130-4700-1859	RES. CF 470ohm 1/8W J 1206	
161	RV68	0130-4700-1859	RES. CF 470ohm 1/8W J 1206	
162	RV69	0130-4700-1859	RES. CF 470ohm 1/8W J 1206	
163	RV70	0130-1002-1859	RES. CF 10Kohm 1/8W J 1206	
164	RV71	0130-1002-1859	RES. CF 10Kohm 1/8W J 1206	
165	RV72	0130-1002-1859	RES. CF 10Kohm 1/8W J 1206	
166	RV73	0130-3301-1859	RES. CF 3.3Kohm 1/8W J 1206	
167	RV74	0130-4709-1859	RES. CF 47ohm 1/8W J 1206	
168	RV75	0130-4709-1859	RES. CF 47ohm 1/8W J 1206	
169	RV77	0130-3301-1859	RES. CF 3.3Kohm 1/8W J 1206	
170	RV81	0130-1001-1859	RES. CF 1.0Kohm 1/8W J 1206	
171	RV91	0130-2002-1859	RES. CF 20Kohm 1/8W J 1206	
172	RV92	0130-1002-1859	RES. CF 10Kohm 1/8W J 1206	
173	RV93	0130-1001-1859	RES. CF 1.0Kohm 1/8W J 1206	
174	RV95	0131-1692-1819	RES. MF 16.9Kohm 1/8W F 1206	
175	RV96	0130-4301-1859	RES. CF 4.3Kohm 1/8W J 1206	
176	RV97	0130-4301-1859	RES. CF 4.3Kohm 1/8W J 1206	
177	SGV01	0270-0002-0140	SPARK GAP 200V T	
178	SGV02	0270-0002-0140	SPARK GAP 200V T	
179	SGV03	0270-0002-0140	SPARK GAP 200V T	
180	SGV04	0270-0001-2220	SPARK GAP 1.2KV A	
181	SGV05	0270-0003-0100	SPARK GAP 300V T	
182	WV01	0451-2500-0744	WAFER 2.50mm 7P 90' Kink	
183	WV02	0451-2500-1244	WAFER 2.50mm 12P 90' Kink	
184	WV04	0452-1000-0296	WAFER 10mm 2P(BLACK)	
185	WV05	0261-0000-0054	CRT SOCKET ISDW02S MITSUBISHI	
186	ZDV01	0400-0891-2000	ZENER 9C1 8.9-9.3V 1/2W	

Confidential – Do Not Copy

11.4. 3017-0322-0160 MAIN/PWR/CTRL BD

ITEM	LOCATION	PART NO	DESCRIPTION	REMARK
1	CA01	0122-0474-2702	P/C X2 0.47uF 275V K B	
2	CA02	0122-1222-2522	D/C Y 2200PF 250V M B	
3	CA03	0122-1222-2522	D/C Y 2200PF 250V M B	
4	CA04	0101-1221-4003	E/C GEN. 220uF 400V 85' S	
5	CA07	0101-1470-1211	E/C GEN. 47uF 16V 105' F	
6	CA08	0111-1102-1312	C/C DISK 1000PF 1KV Y5P F-K	
7	CA09	0101-1330-1311	E/C GEN. 33uF 25V 105' F	
8	CA10	0101-1471-1211	E/C GEN. 470uF 16V 105' F	
9	CA11	0111-1472-1322	C/C DISK 4700PF 1KV Z5U F-K	
10	CA12	0111-1221-1312	C/C DISK 220PF 1KV Y5P F-K	
11	CA13	0111-2101-5102	C/C DISK 100PF 50V NPO F-K	
12	CA14	0111-1103-5122	C/C DISK 0.01uF 50V Z5U F-K	
13	CA15	0101-1101-1311	E/C GEN. 100uF 25V 105' F	
14	CA16	0120-5103-0531	P/C MEF 0.01uF 50V J F-K (T)	
15	CA17	0101-1100-1511	E/C GEN. 10uF 50V 105' F	
16	CA19	0111-1102-5112	C/C DISK 1000PF 50V Y5P F-K	
17	CA20	0101-1101-2012	E/C GEN. 100uF 100V 105' K	
18	CA21	0101-1330-2012	E/C GEN. 33uF 100V 105' K	
19	CA22	0101-1102-1312	E/C GEN. 1000uF 25V 105' K	
20	CA23	0101-1101-1311	E/C GEN. 100uF 25V 105' F	
21	CA24	0101-1100-1511	E/C GEN. 10uF 50V 105' F	
22	CA25	0101-1471-1211	E/C GEN. 470uF 16V 105' F	
23	CA26	0111-2101-5102	C/C DISK 100PF 50V NPO F-K	
24	CA27	0101-1101-1211	E/C GEN. 100uF 16V 105' F	
25	CA28	0101-1471-1211	E/C GEN. 470uF 16V 105' F	
26	CA29	0101-1109-1511	E/C GEN. 1.0uF 50V 105'F	
27	CA32	0101-1100-1511	E/C GEN. 10uF 50V 105' F	
28	CA33	0122-1472-2522	D/C Y 4700PF 250V M N-F	
29	CA34	0122-1472-2522	D/C Y 4700PF 250V M N-F	
30	CA35	0111-1102-1312	C/C DISK 1000PF 1KV Y5P F-K	
31	CA36	0111-1102-5112	C/C DISK 1000PF 50V Y5P F-K	
32	CA37	0101-1102-1312	E/C GEN. 1000uF 25V 105' K	
33	CA39	0111-1101-1312	C/C DISK 100PF 1KV Y5P F-K	
34	CB01	0111-1102-5112	C/C DISK 1000PF 50V Y5P F-K	
35	CB02	0121-2152-1032	P/C R85 1500PF 100V J B	
36	CB03	0101-1101-1211	E/C GEN. 100uF 16V 105' F	
37	CB05	0121-2154-1032	P/C R85 0.15uF 100V J B	
38	CB06	0121-2823-1032	P/C R85 0.082uF 100V J B	
39	CB07	0121-2223-1032	P/C R85 0.022uF 100V J B	
40	CB08	0121-2822-1032	P/C R85 0.0082uF 100V J B	
41	CB09	0101-1478-1511	E/C GEN. 0.47uF 50V 105' F	
42	CB10	0121-2103-1032	P/C R85 0.01uF 100V J B	
43	CB11	0121-2332-1032	P/C R85 3300PF 100V J B	
44	CB12	0111-1392-5112	C/C DISK 3900PF 50V Y5P F-K	
45	CB14	0101-1101-1411	E/C GEN. 100uF 35V 105' F	
46	CB15	0120-5224-1031	P/C MEF 0.22uF 100V J F-K	
47	CB19	0111-1472-5112	C/C DISK 4700PF 50V Y5P F-K	
48	CB20	0111-1152-5112	C/C DISK 1500PF 50V Y5P F-K	
49	CB25	0101-1471-1211	E/C GEN. 470uF 16V 105' F	
50	CC04	0101-1100-1511	E/C GEN. 10uF 50V 105' F	

Confidential – Do Not Copy

ITEM	LOCATION	PART NO	DESCRIPTION	REMARK
51	CC06	0101-1101-1211	E/C GEN. 100uF 16V 105' F	
52	CC07	0111-1104-5102	C/C DISK 0.1uF 50V Y5V F-K	
53	CC09	0101-1101-1211	E/C GEN. 100uF 16V 105' F	
54	CC10	0111-2220-5102	C/C DISK 22PF 50V NPO F-K	
55	CC11	0111-2220-5102	C/C DISK 22PF 50V NPO F-K	
56	CC15	0111-1104-5102	C/C DISK 0.1uF 50V Y5V F-K	
57	CC16	0111-1104-5102	C/C DISK 0.1uF 50V Y5V F-K	
58	CC20	0111-1104-5102	C/C DISK 0.1uF 50V Y5V F-K	
59	CC21	0111-1104-5102	C/C DISK 0.1uF 50V Y5V F-K	
60	CC22	0111-1103-5122	C/C DISK 0.01uF 50V Z5U F-K	
61	CC23	0111-2220-5102	C/C DISK 22PF 50V NPO F-K	
62	CC24	0111-1104-5102	C/C DISK 0.1uF 50V Y5V F-K	
63	CC25	0111-1104-5102	C/C DISK 0.1uF 50V Y5V F-K	
64	CC27	0111-2680-5102	C/C DISK 68PF 50V NPO F-K	
65	CC28	0111-2680-5102	C/C DISK 68PF 50V NPO F-K	
66	CC29	0111-1103-5122	C/C DISK 0.01uF 50V Z5U F-K	
67	CC30	0111-1103-5122	C/C DISK 0.01uF 50V Z5U F-K	
68	CC39	0101-1100-1511	E/C GEN. 10uF 50V 105' F	
69	CC40	0111-2101-5102	C/C DISK 100PF 50V NPO F-K	
70	CC41	0111-2101-5102	C/C DISK 100PF 50V NPO F-K	
71	CE03	0111-1103-5122	C/C DISK 0.01uF 50V Z5U F-K	
72	CE04	0101-3109-1511	E/C N-P 1uF 50V 105' F	
73	CE05	0101-1101-1211	E/C GEN. 100uF 16V 105' F	
74	CE11	0111-1103-5122	C/C DISK 0.01uF 50V Z5U F-K	
75	CE12	0101-3109-1511	E/C N-P 1uF 50V 105' F	
76	CE15	0111-1103-5122	C/C DISK 0.01uF 50V Z5U F-K	
77	CE16	0101-3109-1511	E/C N-P 1uF 50V 105' F	
78	CE18	0111-1103-5122	C/C DISK 0.01uF 50V Z5U F-K	
79	CE20	0101-1101-1211	E/C GEN. 100uF 16V 105' F	
80	CG08	0101-1220-1211	E/C GEN. 22uF 16V 105' F	
81	CG10	0111-1182-5112	C/C DISK 1800PF 50V Y5P F-K	
82	CG13	0120-4102-9031	P/C PPS 0.001uF 1KV J F-K	
83	CG15	0101-1478-1511	E/C GEN. 0.47uF 50V 105' F	
84	CG17	0101-1109-1511	E/C GEN. 1.0uF 50V 105'F	
85	CG19	0101-1100-2212	E/C GEN. 10uF 200V 105' K	
86	CG20	0120-5103-2531	P/C MEF 0.01uF 250V J F-K	
87	CG21	0120-5104-2531	P/C MEF 0.1uF 250V J F-K	
88	CG23	0101-1479-2211	E/C GEN. 4.7uF 200V 105' F	
89	CG24	0111-1471-5212	C/C DISK 470PF 500V Y5P F-K	
90	CG26	0111-2101-5102	C/C DISK 100PF 50V NPO F-K	
91	CG27	0111-1104-5102	C/C DISK 0.1uF 50V Y5V F-K	
92	CG28	0101-1470-1211	E/C GEN. 47uF 16V 105' F	
93	CG29	0120-5224-1031	P/C MEF 0.22uF 100V J F-K	
94	CG30	0101-1100-2011	E/C GEN. 10uF 100V 105' F	
95	CG31	0101-1101-2012	E/C GEN. 100uF 100V 105' K	
96	CG32	0101-1100-1511	E/C GEN. 10uF 50V 105' F	
97	CG33	0101-1100-1511	E/C GEN. 10uF 50V 105' F	
98	CG36	0101-1470-1211	E/C GEN. 47uF 16V 105' F	
99	CG39	0111-1104-5102	C/C DISK 0.1uF 50V Y5V F-K	
100	CG41	0111-1103-5122	C/C DISK 0.01uF 50V Z5U F-K	

Confidential – Do Not Copy

ITEM	LOCATION	PART NO	DESCRIPTION	REMARK
101	CG42	0111-1682-5112	C/C DISK 6800PF 50V Y5P F-K	
102	CH01	0111-2101-5102	C/C DISK 100PF 50V NPO F-K	
103	CH03	0120-2102-0531	P/C PEN 0.001uF 50V J F-K (T)	
104	CH04	0111-1102-5112	C/C DISK 1000PF 50V Y5P F-K	
105	CH05	0230-5008-0000	JUMPER WIRE 5.0*0.6mm	
106	CH06	0111-1822-5112	C/C DISK 8200PF 50V Y5P F-K	
107	CH07	0120-2472-0531	P/C PEN 0.0047uF 50V J F-K	
108	CH08	0101-1109-1511	E/C GEN. 1.0uF 50V 105'F	
109	CH09	0101-1470-1211	E/C GEN. 47uF 16V 105' F	
110	CH10	0111-1102-5112	C/C DISK 1000PF 50V Y5P F-K	
111	CH13	0111-1104-5102	C/C DISK 0.1uF 50V Y5V F-K	
112	CH18	0101-1101-1211	E/C GEN. 100uF 16V 105' F	
113	CH20	0101-1101-1211	E/C GEN. 100uF 16V 105' F	
114	CH21	0111-1102-5112	C/C DISK 1000PF 50V Y5P F-K	
115	CH22	0120-4472-9131	P/C PPS 0.0047uF 1.6KV J F-K	
116	CH23	0120-2102-1031	P/C PEN 0.001uF 100V J F-K (T)	
117	CH25	0111-1472-1322	C/C DISK 4700PF 1KV Z5U F-K	
118	CH26	0120-5105-0531	P/C MEF 1.0uF 50V J F-K	
119	CH27	0101-1109-1511	E/C GEN. 1.0uF 50V 105'F	
120	CH28	0101-1101-1311	E/C GEN. 100uF 25V 105' F	
121	CH30	0101-1109-1511	E/C GEN. 1.0uF 50V 105'F	
122	CH33	0120-2102-1031	P/C PEN 0.001uF 100V J F-K (T)	
123	CH38	0101-1109-1511	E/C GEN. 1.0uF 50V 105'F	
124	CH39	0120-9154-2531	P/C MPS 0.15uF 250V J F-K	
125	CH40	0101-1479-1511	E/C GEN. 4.7uF 50V 105' F	
126	CH41	0120-9394-2531	P/C MPS 0.39uF 250V J F-K	
127	CH43	0120-9125-2531	P/C MPS 1.2uF 250V J F-K	
128	CH44	0121-8224-4031	P/C MPSA 0.22uF 400V J F-K	
129	CH61	0101-1100-1511	E/C GEN. 10uF 50V 105' F	
130	CH62	0101-1101-2012	E/C GEN. 100uF 100V 105' K	
131	CH64	0111-1102-5112	C/C DISK 1000PF 50V Y5P F-K	
132	CH65	0111-2101-5102	C/C DISK 100PF 50V NPO F-K	
133	DA01	0390-5001-0202	GEN. DIODE 1N5406 T/B	
134	DA02	0390-5001-0202	GEN. DIODE 1N5406 T/B	
135	DA03	0390-5001-0202	GEN. DIODE 1N5406 T/B	
136	DA04	0390-5001-0202	GEN. DIODE 1N5406 T/B	
137	DA05	0390-3000-4022	FAST DIODE BA159 T	
138	DA06	0390-3003-1202	FAST DIODE 1N4935 T/B DO-41	
139	DA07	0390-3003-1202	FAST DIODE 1N4935 T/B DO-41	
140	DA08	0390-3000-4022	FAST DIODE BA159 T	
141	DA09	0390-5000-1052	GEN. DIODE 1N4148 T	
142	DA10	0390-5000-1052	GEN. DIODE 1N4148 T	
143	DA11	0390-5000-1052	GEN. DIODE 1N4148 T	
144	DA12	0390-5000-1052	GEN. DIODE 1N4148 T	
145	DA13	0390-5000-1052	GEN. DIODE 1N4148 T	
146	DA14	0390-5000-1052	GEN. DIODE 1N4148 T	
147	DA15	0390-3002-8022	FAST DIODE FUF5402 T	
148	DA16	0390-3005-3202	FAST DIODE UG3004 T	
149	DA16H	1712-0600-0020	HEAT SINK (4.4Wx22.6Lx35.5H)	
150	DA17	0390-3003-0022	FAST DIODE FUF5406 T	

Confidential – Do Not Copy

ITEM	LOCATION	PART NO	DESCRIPTION	REMARK
151	DA17H	1712-0600-0020	HEAT SINK (4.4Wx22.6Lx35.5H)	
152	DA18	0390-5000-3202	GEN. DIODE 1N4002F T	
153	DA19	0390-3003-1202	FAST DIODE 1N4935 T/B DO-41	
154	DA20	0390-5000-1052	GEN. DIODE 1N4148 T	
155	DA21	0390-5000-1052	GEN. DIODE 1N4148 T	
156	DA23	0390-3003-2052	FAST DIODE BYT53G T	
157	DB01	0390-5000-1052	GEN. DIODE 1N4148 T	
158	DB02	0390-5000-3202	GEN. DIODE 1N4002F T	
159	DB10	0390-5000-1052	GEN. DIODE 1N4148 T	
160	DC01	0390-5000-1052	GEN. DIODE 1N4148 T	
161	DG01	0390-5000-1052	GEN. DIODE 1N4148 T	
162	DG02	0390-5000-1052	GEN. DIODE 1N4148 T	
163	DG03	0390-3005-3202	FAST DIODE UG3004 T	
164	DG04	0390-5000-1052	GEN. DIODE 1N4148 T	
165	DG05	0390-5000-1052	GEN. DIODE 1N4148 T	
166	DG06	0390-3003-2052	FAST DIODE BYT53G T	
167	DG10	0390-5000-1052	GEN. DIODE 1N4148 T	
168	DG11	0390-5000-1052	GEN. DIODE 1N4148 T	
169	DG13	0390-5000-1052	GEN. DIODE 1N4148 T	
170	DG14	0390-3005-0050	FAST DIODE BYT42G N-F	
171	DG15	0390-3003-1202	FAST DIODE 1N4935 T/B DO-41	
172	DG16	0390-3005-3202	FAST DIODE UG3004 T	
173	DG17	0390-5000-9132	GEN. DIODE BAV21 T	
174	DG18	0390-5000-9132	GEN. DIODE BAV21 T	
175	DG20	0390-5000-1052	GEN. DIODE 1N4148 T	
176	DH01	0390-5000-1052	GEN. DIODE 1N4148 T	
177	DH02	0390-5000-1052	GEN. DIODE 1N4148 T	
178	DH03	0390-5000-1052	GEN. DIODE 1N4148 T	
179	DH04	0390-3000-4022	FAST DIODE BA159 T	
180	DH06	0390-3004-8022	FAST DIODE FUF5408 T	
181	DH08	0390-2000-5190	DAMPER DIODE DD84RC N-F	
182	DH08S	1724-1703-0802	SCREW,PB,M3.0x8L,Zn-Cc	
183	DH09	0390-3000-1012	FAST DIODE 10DF2 T	
184	DH10	0390-5000-1052	GEN. DIODE 1N4148 T	
185	DH11	0390-6000-1012	SCHOTTKY DIODE 11DQ06 T	
186	DH12	0390-5000-1052	GEN. DIODE 1N4148 T	
187	DH13	0390-5000-1052	GEN. DIODE 1N4148 T	
188	DH14	0390-5000-1052	GEN. DIODE 1N4148 T	
189	FA01	0180-4402-5201	FUSE T-L 250V 4A 5*20mm Glass	
190	FA011	0190-0000-0010	FUSE CLIP 5*20mm	
191	FG01	0370-0000-0710	FERRITE CORE RH 16x17x9	
192	FG02	0370-0000-0510	FERRITE CORE 17.5x28.5x9.5	
193	FG02C	1701-1400-9800	WIRE SADDLE/ YJ98	
194	G001	0460-2001-0092	WH 1015#18 320mm BLACK T/C	
195	G03	0460-1701-0230	WH SRA4.3 1015#18 95mm	
196	G05	0291-0000-0000	PIN 1.55(D)x9(L) 1P VER	
197	ICA01	0430-4004-0230	IC TOP221Y TO-220 3PIN	
198	ICA02	0430-7000-7107	IC UC3843N DIP 8PIN	
199	ICA03	0430-6000-3210	IC MC7805CT TO-220 3 Pin	
200	ICA04	0430-7000-1110	IC 4N35 DIP 6PIN	

Confidential – Do Not Copy

ITEM	LOCATION	PART NO	DESCRIPTION	REMARK
201	ICA05	0430-6000-5207	IC LM7812 TO-220 3 Pin	
202	ICA05H	1712-0400-1400	HEAT SINK (23.5Wx16.5Tx25H)	
203	ICA05S	1724-2603-0602	SCREW,BTCW,M3.0x6L,Zn-Cc	
204	ICA07	0430-6000-4310	IC TL431CLP TO-92 3PIN T	
205	ICB01	0430-4005-3409	IC TDA4854/V2 SDIP 32PIN	
206	ICB02	0430-4001-7107	IC TDA8172 DIP 7PIN	
207	ICB02H	1712-0300-0800	HEAT SINK FOR (80Wx39Tx69H)	
208	ICB02R	1701-1100-0200	SILICON RUBBER/TO-2203	
209	ICB02S	1724-2603-0802	SCREW,BTCW,M3.0x8L,Zz-Cc	
210	ICB02W	1701-1300-0100	TRANSISTOR WASHER/602S	
211	ICC01	0430-5002-6142	IC NT68P62 DIP 40PIN (OTP)	
212	ICC02	0430-3000-3117	IC 24LC04B/P DIP 8PIN	
213	ICC03	0430-4000-1104	IC LM358 DIP-8	
214	ICE01	0430-4000-6104	IC LM324N DIP-14	
215	ICG01	0430-4000-1104	IC LM358 DIP-8	
216	ICH01	0430-3000-1115	IC TLC555CP DIP-8	
217	JPC02	0230-5008-0000	JUMPER WIRE 5.0*0.6mm	
218	JPC03	0230-5008-0000	JUMPER WIRE 5.0*0.6mm	
219	LA01	0360-1000-0010	RING CORE L:250uH 4A	
220	LA02	0360-1000-0010	RING CORE L:250uH 4A	
221	LA03	0370-0000-1010	FERRITE CORE RH 3.5x6x1.0(W)x2	
222	LA04	0370-0000-1610	BEAD CORE W4B RH 3.5x6x1.0 T	
223	LA05	0370-0000-0210	BEAD CORE RH 3.5x8x1.0mm T	
224	LA06	0361-1000-0010	DRUM CORE L:60uH 1A(9*12)	
225	LA07	0370-0000-1010	FERRITE CORE RH 3.5x6x1.0(W)x2	
226	LC01	0344-2290-0601	PEAKING COIL 2.2uH 1/4W K A-T	
227	LG01	0370-0000-1610	BEAD CORE W4B RH 3.5x6x1.0 T	
228	LH01	0350-0130-0041	X'FMR EI30 200uH 3A	
229	LH02	0354-0125-0050	X'FMR H-CEN EI25 7.0mH 0.45A PF775	
230	LH04	0230-5008-0000	JUMPER WIRE 5.0*0.6mm	
231	LH05	0381-0000-0090	LINEARITY COIL 12.7uH -4A	
232	LH06	0361-1000-0140	DRUM CORE L:60uH 10x16	
233	MB02	1701-1402-0300	WIRE SADDLE/ YJ-203S	
234	MB03	1712-0100-0152	CHASSIS BRACKET LEFT	
235	MB04	1712-0100-0163	CHASSIS BRACKET RIGHT	
236	MB05	1712-0100-0590	CHASSIS BRACKET FRONT	
237	MB06	1712-0100-3201	CHASSIS BRACKET REAR/AT897D	
238	MB10	1724-2603-0602	SCREW,BTCW,M3.0x6L,Zn-Cc	
239	MB11	1724-2603-1002	SCREW,BTCW,M3.0x10L,Zn-Cc	
240	MB12	1724-3804-0802	SCREW,PBATW,M4.0x8L,Zz-Cc	
241	PCB1	0170-2240-0164	PCB M/P/CTRL BD V0 337x271x1.6t AT897-1	
242	PRC01	0141-1002-1850	ARRAY RES. A(X) 10Kohm 1/8W J 8P	
243	PRC02	0141-4701-1550	ARRAY RES. A(X) 4.7Kohm 1/8W J 5P	
244	QA01	0420-1001-2501	POWER MOS IRFPE50 TO-3P	
245	QA01H	1712-0400-0110	HEAT SINK 60Wx15Tx80H AT897-1	
246	QA01R	1701-1100-0100	SILICON RUBBER/TO-3P3	
247	QA01S	1724-1703-1002	SCREW,PB,M3.0x10L,Zn-Cc	
248	QA04	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	
249	QA05	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	
250	QA07	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	

Confidential – Do Not Copy

ITEM	LOC	PART NO	DESCRIPTION	REMARK
251	QA12	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	
252	QB01	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	
253	QB02	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	
254	QB03	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	
255	QB04	0410-0000-1109	TRANSISTOR 2SA733P TO-92 T	
256	QB05	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	
257	QC05	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	
258	QC06	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	
259	QC10	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	
260	QC11	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	
261	QE01	0410-2000-3106	TRANSISTOR 2SC1213AC TO-92 T	
262	QE02	0410-0000-2106	TRANSISTOR 2SA673AC TO-92 T	
263	QE05	0410-2000-3106	TRANSISTOR 2SC1213AC TO-92 T	
264	QE06	0410-0000-2106	TRANSISTOR 2SA673AC TO-92 T	
265	QE07	0410-2000-3106	TRANSISTOR 2SC1213AC TO-92 T	
266	QE08	0410-0000-2106	TRANSISTOR 2SA673AC TO-92 T	
267	QG03	0420-1001-4401	POWER MOS IRF730 TO-220	
268	QG03H	1712-0400-1401	HEAT SINK (23.5Wx16.5Tx50H)	
269	QG03S	1724-1703-0602	SCREW,PB,M3.0x6L,Zn-Cc	
270	QG04	0410-2000-3106	TRANSISTOR 2SC1213AC TO-92 T	
271	QG05	0410-4000-2111	TRANSISTOR BF421 TO-92 T	
272	QG06	0410-4000-1111	TRANSISTOR BF420 TO-92 T	
273	QG07	0410-0000-1109	TRANSISTOR 2SA733P TO-92 T	
274	QG08	0410-4000-3105	TRANSISTOR BF422 TO-92 T	
275	QG09	0410-6000-1311	TRANSISTOR BD139 TO-126	
276	QG09H	1712-0400-0100	HEAT SINK (12Wx5Tx22H)	
277	QG09S	1724-1703-0602	SCREW,PB,M3.0x6L,Zn-Cc	
278	QG10	0410-6000-2311	TRANSISTOR BD140 TO-126	
279	QG10H	1712-0400-0100	HEAT SINK (12Wx5Tx22H)	
280	QG10S	1724-1703-0602	SCREW,PB,M3.0x6L,Zn-Cc	
281	QG11	0410-0000-2106	TRANSISTOR 2SA673AC TO-92 T	
282	QG12	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	
283	QG13	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	
284	QG14	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	
285	QG15	0410-2000-3106	TRANSISTOR 2SC1213AC TO-92 T	
286	QH01	0410-2000-3106	TRANSISTOR 2SC1213AC TO-92 T	
287	QH02	0410-0000-2106	TRANSISTOR 2SA673AC TO-92 T	
288	QH03	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	
289	QH05	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	
290	QH06	0410-2001-3516	TRANSISTOR 2SC5440 TO-3P	
291	QH06H	1712-0400-0090	HEAT SINK FOR HORIZONTAL TRANSISTOR	
292	QH06S	1724-1703-0802	SCREW,PB,M3.0x8L,Zn-Cc	
293	QH07	0410-2000-3106	TRANSISTOR 2SC1213AC TO-92 T	
294	QH08	0410-0000-2106	TRANSISTOR 2SA673AC TO-92 T	
295	QH09	0410-6000-1311	TRANSISTOR BD139 TO-126	
296	QH09H	1712-0400-0200	HEAT SINK (15Wx11Tx22.0H)	
297	QH09S	1724-1703-0602	SCREW,PB,M3.0x6L,Zn-Cc	
298	QH10	0410-0000-2106	TRANSISTOR 2SA673AC TO-92 T	
299	QH13	0420-1000-2407	POWER MOS IRF640 TO-220	
300	QH14	0420-1000-2407	POWER MOS IRF640 TO-220	

Confidential – Do Not Copy

ITEM	LOC	PART NO	DESCRIPTION	REMARK
301	QH14H	1712-0400-0202	HEAT SINK (15W*11T*40.0H)	
302	QH14S	1724-1703-0602	SCREW,PB,M3.0x6L,Zn-Cc	
303	QH15	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	
304	QH16	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	
305	QH17	0410-0000-2106	TRANSISTOR 2SA673AC TO-92 T	
306	QH18	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	
307	QH19	0420-1000-1401	POWER MOS IRF630 TO-220	
308	QH20	0410-0000-1109	TRANSISTOR 2SA733P TO-92 T	
309	QH21	0410-2000-3106	TRANSISTOR 2SC1213AC TO-92 T	
310	QH22	0420-1001-5401	POWER MOS IRF740 TO-220 3PIN	
311	QH22H	1712-0400-1400	HEAT SINK (23.5Wx16.5Tx25H)	
312	QH22S	1724-1703-0602	SCREW,PB,M3.0x6L,Zn-Cc	
313	QH23	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	
314	QH24	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	
315	QH25	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	
316	QH26	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	
317	RA01	0130-1004-1250	RES. CF 1.0Mohm 1/2W J A	
318	RA02	0130-3603-1250	RES. CF 360Kohm 1/2W J A	
319	RA03	0130-4702-0152	RES. CF 47Kohm 1W J A-FK	
320	RA04	0130-1000-1850	RES. CF 100ohm 1/8W J A	
321	RA06	0130-1000-1450	RES. CF 100ohm 1/4W J A	
322	RA07	0130-4708-1450	RES. CF 4.7ohm 1/4W J A	
323	RA08	0130-1002-1450	RES. CF 10Kohm 1/4W J A	
324	RA09	0130-1001-1450	RES. CF 1.0Kohm 1/4W J A	
325	RA10	0130-4701-1850	RES. CF 4.7Kohm 1/8W J A	
326	RA11	0132-0128-0252	RES. MOF 0.12ohm 2W J A-FK	
327	RA12	0130-2702-1850	RES. CF 27Kohm 1/8W J A	
328	RA13	0130-1202-1450	RES. CF 12Kohm 1/4W J A	
329	RA14	0130-4700-1850	RES. CF 470ohm 1/8W J A	
330	RA15	0130-1004-1850	RES. CF 1.0Mohm 1/8W J A	
331	RA16	0130-1002-1450	RES. CF 10Kohm 1/4W J A	
332	RA17	0130-1002-1450	RES. CF 10Kohm 1/4W J A	
333	RA18	0130-1009-1450	RES. CF 10ohm 1/4W J A	
334	RA19	0130-1009-1450	RES. CF 10ohm 1/4W J A	
335	RA20	0130-2201-1450	RES. CF 2.2Kohm 1/4W J A	
336	RA21	0130-3309-1250	RES. CF 33ohm 1/2W J A	
337	RA22	0133-1203-0152	RES. MOF(M) 120Kohm 1W J A-FK	
338	RA23	0132-6202-0112	RES. MOF 62Kohm 1W F A-FK	
339	RA24	0131-1911-1410	RES. MF 1.91Kohm 1/4W F A	
340	RA25	0130-4702-1850	RES. CF 47Kohm 1/8W J A	
341	RA26	0130-1001-1450	RES. CF 1.0Kohm 1/4W J A	
342	RA27	0130-1002-1850	RES. CF 10Kohm 1/8W J A	
343	RA28	0130-1000-1450	RES. CF 100ohm 1/4W J A	
344	RA29	0130-1000-1850	RES. CF 100ohm 1/8W J A	
345	RA30	0230-1009-0000	JUMPER WIRE 10*0.6mm	
346	RA31	0130-1001-1250	RES. CF 1.0Kohm 1/2W J A	
347	RA32	0130-1001-1450	RES. CF 1.0Kohm 1/4W J A	
348	RA33	0130-1002-1850	RES. CF 10Kohm 1/8W J A	
349	RA34	0130-1009-1450	RES. CF 10ohm 1/4W J A	
350	RA35	0130-1002-1450	RES. CF 10Kohm 1/4W J A	

Confidential – Do Not Copy

ITEM	LOC	PART NO	DESCRIPTION	REMARK
351	RA36	0130-1009-1850	RES. CF 10ohm 1/8W J A	
352	RA38	0230-1759-0000	JUMPER WIRE 17.5*0.6mm	
353	RA39	0130-0228-0150	RES. CF 0.22ohm 1W J A	
354	RA40	0130-1001-1850	RES. CF 1.0Kohm 1/8W J A	
355	RA41	0132-6802-0252	RES. MOF 68Kohm 2W J A-FK	
356	RA42	0132-6802-0252	RES. MOF 68Kohm 2W J A-FK	
357	RA45	0130-2000-1850	RES. CF 200ohm 1/8W J A	
358	RA46	0130-5109-1250	RES. CF 51ohm 1/2W J A	
359	RA68	0130-1003-1450	RES. CF 100Kohm 1/4W J A	
360	RB01	0130-4701-1450	RES. CF 4.7Kohm 1/4W J A	
361	RB02	0130-1802-1850	RES. CF 18Kohm 1/8W J A	
362	RB03	0130-1000-1450	RES. CF 100ohm 1/4W J A	
363	RB04	0130-6801-1850	RES. CF 6.8Kohm 1/8W J A	
364	RB05	0130-7502-1850	RES. CF 75Kohm 1/8W J A	
365	RB06	0130-2401-1450	RES. CF 2.4Kohm 1/4W J A	
366	RB07	0130-1002-1450	RES. CF 10Kohm 1/4W J A	
367	RB08	0130-8201-1450	RES. CF 8.2Kohm 1/4W J A	
368	RB09	0130-3001-1850	RES. CF 3.0Kohm 1/8W J A	
369	RB10	0130-6801-1450	RES. CF 6.8Kohm 1/4W J A	
370	RB11	0130-1008-1450	RES. CF 1.0ohm 1/4W J A	
371	RB12	0130-1000-1450	RES. CF 100ohm 1/4W J A	
372	RB14	0130-9101-1850	RES. CF 9.1Kohm 1/8W J A	
373	RB15	0130-3301-1850	RES. CF 3.3Kohm 1/8W J A	
374	RB16	0130-9101-1850	RES. CF 9.1Kohm 1/8W J A	
375	RB17	0130-1001-1850	RES. CF 1.0Kohm 1/8W J A	
376	RB18	0130-1001-1850	RES. CF 1.0Kohm 1/8W J A	
377	RB19	0130-1000-1850	RES. CF 100ohm 1/8W J A	
378	RB20	0130-1001-1850	RES. CF 1.0Kohm 1/8W J A	
379	RB21	0130-1000-1450	RES. CF 100ohm 1/4W J A	
380	RB22	0130-1000-1450	RES. CF 100ohm 1/4W J A	
381	RB23	0130-2202-1850	RES. CF 22Kohm 1/8W J A	
382	RB24	0130-3301-1850	RES. CF 3.3Kohm 1/8W J A	
383	RB25	0131-6810-1810	RES. MF 681ohm 1/8W F A	
384	RB26	0131-2741-1810	RES. MF 2.74Kohm 1/8W F A	
385	RB27	0130-1000-1450	RES. CF 100ohm 1/4W J A	
386	RB28	0131-1212-1410	RES. MF 12.1Kohm 1/4W F A	
387	RB29	0131-6191-1410	RES. MF 6.19Kohm 1/4W F A	
388	RB30	0230-2009-0000	JUMPER WIRE 20*0.6mm	
389	RB31	0230-2009-0000	JUMPER WIRE 20*0.6mm	
390	RB32	0130-1508-1450	RES. CF 1.5ohm 1/4W J A	
391	RB33	0131-1212-1410	RES. MF 12.1Kohm 1/4W F A	
392	RB34	0131-6191-1810	RES. MF 6.19Kohm 1/8W F A	
393	RB35	0132-1008-0252	RES. MOF 1ohm 2W J A-FK	
394	RB36	0130-5100-1250	RES. CF 510ohm 1/2W J A	
395	RB43	0130-4701-1850	RES. CF 4.7Kohm 1/8W J A	
396	RB44	0230-5008-0000	JUMPER WIRE 5.0*0.6mm	
397	RB45	0130-1002-1850	RES. CF 10Kohm 1/8W J A	
398	RB46	0130-1002-1850	RES. CF 10Kohm 1/8W J A	
399	RB47	0130-1009-1450	RES. CF 10ohm 1/4W J A	
400	RB51	0130-1002-1450	RES. CF 10Kohm 1/4W J A	

Confidential – Do Not Copy

ITEM	LOC	PART NO	DESCRIPTION	REMARK
401	RB52	0130-1002-1450	RES. CF 10Kohm 1/4W J A	
402	RB54	0130-1000-1850	RES. CF 100ohm 1/8W J A	
403	RB57	0130-1002-1850	RES. CF 10Kohm 1/8W J A	
404	RB58	0130-1001-1450	RES. CF 1.0Kohm 1/4W J A	
405	RB62	0130-3309-1450	RES. CF 33ohm 1/4W J A	
406	RB63	0130-1001-1850	RES. CF 1.0Kohm 1/8W J A	
407	RC01	0130-1000-1850	RES. CF 100ohm 1/8W J A	
408	RC02	0130-2201-1450	RES. CF 2.2Kohm 1/4W J A	
409	RC04	0130-1002-1850	RES. CF 10Kohm 1/8W J A	
410	RC05	0130-1002-1850	RES. CF 10Kohm 1/8W J A	
411	RC07	0130-1001-1850	RES. CF 1.0Kohm 1/8W J A	
412	RC09	0130-1000-1450	RES. CF 100ohm 1/4W J A	
413	RC10	0130-1005-1850	RES. CF 10Mohm 1/8W J A	
414	RC11	0130-1000-1850	RES. CF 100ohm 1/8W J A	
415	RC12	0130-1000-1450	RES. CF 100ohm 1/4W J A	
416	RC13	0130-4702-1450	RES. CF 47Kohm 1/4W J A	
417	RC14	0130-4702-1450	RES. CF 47Kohm 1/4W J A	
418	RC15	0130-2002-1850	RES. CF 20Kohm 1/8W J A	
419	RC16	0130-1502-1450	RES. CF 15Kohm 1/4W J A	
420	RC17	0130-1002-1850	RES. CF 10Kohm 1/8W J A	
421	RC22	0130-1000-1850	RES. CF 100ohm 1/8W J A	
422	RC23	0130-1000-1450	RES. CF 100ohm 1/4W J A	
423	RC25	0130-2201-1450	RES. CF 2.2Kohm 1/4W J A	
424	RC26	0130-1000-1450	RES. CF 100ohm 1/4W J A	
425	RC27	0130-1001-1850	RES. CF 1.0Kohm 1/8W J A	
426	RC31	0130-2002-1450	RES. CF 20Kohm 1/4W J A	
427	RC32	0130-1000-1450	RES. CF 100ohm 1/4W J A	
428	RC33	0130-1000-1850	RES. CF 100ohm 1/8W J A	
429	RC34	0130-1000-1850	RES. CF 100ohm 1/8W J A	
430	RC35	0130-2201-1850	RES. CF 2.2Kohm 1/8W J A	
431	RC36	0130-1002-1850	RES. CF 10Kohm 1/8W J A	
432	RC37	0130-2201-1850	RES. CF 2.2Kohm 1/8W J A	
433	RC38	0130-2201-1450	RES. CF 2.2Kohm 1/4W J A	
434	RC39	0130-1002-1450	RES. CF 10Kohm 1/4W J A	
435	RC40	0130-2201-1850	RES. CF 2.2Kohm 1/8W J A	
436	RC41	0130-4702-1850	RES. CF 47Kohm 1/8W J A	
437	RC42	0130-4701-1850	RES. CF 4.7Kohm 1/8W J A	
438	RC43	0130-1000-1450	RES. CF 100ohm 1/4W J A	
439	RC46	0230-2509-0000	JUMPER WIRE 25*0.6mm	
440	RC48	0130-1001-1450	RES. CF 1.0Kohm 1/4W J A	
441	RC51	0130-2201-1850	RES. CF 2.2Kohm 1/8W J A	
442	RC52	0130-1000-1450	RES. CF 100ohm 1/4W J A	
443	RC53	0130-1002-1850	RES. CF 10Kohm 1/8W J A	
444	RC54	0130-1002-1850	RES. CF 10Kohm 1/8W J A	
445	RC55	0130-1003-1850	RES. CF 100Kohm 1/8W J A	
446	RC56	0130-1003-1850	RES. CF 100Kohm 1/8W J A	
447	RC57	0130-1003-1850	RES. CF 100Kohm 1/8W J A	
448	RC58	0130-1003-1850	RES. CF 100Kohm 1/8W J A	
449	RC59	0130-1001-1450	RES. CF 1.0Kohm 1/4W J A	
450	RC63	0130-1001-1850	RES. CF 1.0Kohm 1/8W J A	

Confidential – Do Not Copy

ITEM	LOC	PART NO	DESCRIPTION	REMARK
451	RC65	0130-4701-1850	RES. CF 4.7Kohm 1/8W J A	
452	RC66	0130-1803-1850	RES. CF 180Kohm 1/8W J A	
453	RC67	0130-1001-1850	RES. CF 1.0Kohm 1/8W J A	
454	RC74	0130-4701-1450	RES. CF 4.7Kohm 1/4W J A	
455	RC75	0130-4701-1450	RES. CF 4.7Kohm 1/4W J A	
456	RC80	0130-6809-1450	RES. CF 68ohm 1/4W J A	
457	RC81	0130-6809-1450	RES. CF 68ohm 1/4W J A	
458	RC82	0130-1000-1850	RES. CF 100ohm 1/8W J A	
459	RE01	0130-1008-1850	RES. CF 1.0ohm 1/8W J A	
460	RE02	0130-1003-1450	RES. CF 100Kohm 1/4W J A	
461	RE07	0130-1800-1250	RES. CF 180ohm 1/2W J A	
462	RE08	0130-5109-1450	RES. CF 51ohm 1/4W J A	
463	RE10	0130-1009-1850	RES. CF 10ohm 1/8W J A	
464	RE13	0230-1009-0000	JUMPER WIRE 10*0.6mm	
465	RE14	0130-1003-1450	RES. CF 100Kohm 1/4W J A	
466	RE15	0130-7509-1250	RES. CF 75ohm 1/2W J A	
467	RE16	0130-5109-1450	RES. CF 51ohm 1/4W J A	
468	RE17	0230-1009-0000	JUMPER WIRE 10*0.6mm	
469	RE18	0130-1003-1450	RES. CF 100Kohm 1/4W J A	
470	RE19	0130-1800-1250	RES. CF 180ohm 1/2W J A	
471	RE20	0130-5109-1450	RES. CF 51ohm 1/4W J A	
472	RE21	0130-1002-1850	RES. CF 10Kohm 1/8W J A	
473	RE22	0130-1601-1450	RES. CF 1.6Kohm 1/4W J A	
474	RG01	0130-1001-1850	RES. CF 1.0Kohm 1/8W J A	
475	RG02	0130-1008-1450	RES. CF 1.0ohm 1/4W J A	
476	RG03	0130-3301-1850	RES. CF 3.3Kohm 1/8W J A	
477	RG04	0130-1001-1850	RES. CF 1.0Kohm 1/8W J A	
478	RG05	0130-4701-1850	RES. CF 4.7Kohm 1/8W J A	
479	RG08	0130-2002-1450	RES. CF 20Kohm 1/4W J A	
480	RG09	0130-2702-1850	RES. CF 27Kohm 1/8W J A	
481	RG10	0130-5601-1850	RES. CF 5.6Kohm 1/8W J A	
482	RG11	0130-4701-1850	RES. CF 4.7Kohm 1/8W J A	
483	RG12	0130-4704-1850	RES. CF 4.7Mohm 1/8W J A	
484	RG13	0130-1002-1850	RES. CF 10Kohm 1/8W J A	
485	RG14	0130-7501-1850	RES. CF 7.5Kohm 1/8W J A	
486	RG15	0130-3002-1850	RES. CF 30Kohm 1/8W J A	
487	RG16	0130-2403-1850	RES. CF 240Kohm 1/8W J A	
488	RG17	0130-3603-1850	RES. CF 360Kohm 1/8W J A	
489	RG18	0370-0000-0410	BEAD CORE RH 3.5x4.7x1.0mm	
490	RG20	0130-4701-1450	RES. CF 4.7Kohm 1/4W J A	
491	RG21	0130-4701-1450	RES. CF 4.7Kohm 1/4W J A	
492	RG22	0133-1009-0352	RES. MOF(M) 10ohm 3W J A-FK	
493	RG23	0130-4709-1450	RES. CF 47ohm 1/4W J A	
494	RG24	0130-2402-1850	RES. CF 24Kohm 1/8W J A	
495	RG26	0130-2702-1850	RES. CF 27Kohm 1/8W J A	
496	RG27	0130-1002-1450	RES. CF 10Kohm 1/4W J A	
497	RG28	0130-2002-1850	RES. CF 20Kohm 1/8W J A	
498	RG31	0130-4709-1450	RES. CF 47ohm 1/4W J A	
499	RG32	0130-1003-1450	RES. CF 100Kohm 1/4W J A	
500	RG33	0130-3301-1450	RES. CF 3.3Kohm 1/4W J A	

Confidential – Do Not Copy

ITEM	LOC	PART NO	DESCRIPTION	REMARK
501	RG34	0130-1003-1450	RES. CF 100Kohm 1/4W J A	
502	RG37	0130-5601-1850	RES. CF 5.6Kohm 1/8W J A	
503	RG38	0130-4701-1850	RES. CF 4.7Kohm 1/8W J A	
504	RG39	0130-2001-1850	RES. CF 2.0Kohm 1/8W J A	
505	RG40	0130-1103-1850	RES. CF 110Kohm 1/8W J A	
506	RG41	0130-1203-1850	RES. CF 120Kohm 1/8W J A	
507	RG42	0130-1001-1450	RES. CF 1.0Kohm 1/4W J A	
508	RG44	0130-1002-1850	RES. CF 10Kohm 1/8W J A	
509	RG45	0130-4701-1850	RES. CF 4.7Kohm 1/8W J A	
510	RG46	0130-4701-1850	RES. CF 4.7Kohm 1/8W J A	
511	RG47	0130-1002-1450	RES. CF 10Kohm 1/4W J A	
512	RG48	0130-6201-1850	RES. CF 6.2Kohm 1/8W J A	
513	RG49	0130-8203-1450	RES. CF 820Kohm 1/4W J A	
514	RG50	0130-1501-1850	RES. CF 1.5Kohm 1/8W J A	
515	RG51	0130-1503-1250	RES. CF 150Kohm 1/2W J A	
516	RG52	0130-1001-1450	RES. CF 1.0Kohm 1/4W J A	
517	RG53	0130-1801-1850	RES. CF 1.8Kohm 1/8W J A	
518	RG54	0130-4709-1850	RES. CF 47ohm 1/8W J A	
519	RG55	0130-2002-1450	RES. CF 20Kohm 1/4W J A	
520	RG56	0130-1009-1850	RES. CF 10ohm 1/8W J A	
521	RG57	0130-1009-1850	RES. CF 10ohm 1/8W J A	
522	RG58	0130-1009-1450	RES. CF 10ohm 1/4W J A	
523	RG59	0130-2702-1450	RES. CF 27Kohm 1/4W J A	
524	RG60	0130-2001-1850	RES. CF 2.0Kohm 1/8W J A	
525	RG61	0130-4701-1850	RES. CF 4.7Kohm 1/8W J A	
526	RG62	0133-1009-0154	RES. MOF(M) 10ohm 1W J R-K	
527	RG63	0130-6803-1850	RES. CF 680Kohm 1/8W J A	
528	RG70	0130-1001-1850	RES. CF 1.0Kohm 1/8W J A	
529	RG72	0130-2701-1850	RES. CF 2.7Kohm 1/8W J A	
530	RH01	0130-1202-1850	RES. CF 12Kohm 1/8W J A	
531	RH02	0130-1002-1450	RES. CF 10Kohm 1/4W J A	
532	RH03	0131-6811-1810	RES. MF 6.81Kohm 1/8W F A	
533	RH04	0130-6801-1850	RES. CF 6.8Kohm 1/8W J A	
534	RH05	0130-1001-1450	RES. CF 1.0Kohm 1/4W J A	
535	RH06	0130-1202-1850	RES. CF 12Kohm 1/8W J A	
536	RH07	0130-1002-1850	RES. CF 10Kohm 1/8W J A	
537	RH09	0130-1002-1850	RES. CF 10Kohm 1/8W J A	
538	RH10	0130-1001-1850	RES. CF 1.0Kohm 1/8W J A	
539	RH11	0130-1502-1450	RES. CF 15Kohm 1/4W J A	
540	RH12	0130-1802-1450	RES. CF 18Kohm 1/4W J A	
541	RH14	0130-7501-1850	RES. CF 7.5Kohm 1/8W J A	
542	RH15	0130-1002-1850	RES. CF 10Kohm 1/8W J A	
543	RH16	0130-1009-1850	RES. CF 10ohm 1/8W J A	
544	RH17	0130-4700-1250	RES. CF 470ohm 1/2W J A	
545	RH18	0130-1001-1450	RES. CF 1.0Kohm 1/4W J A	
546	RH20	0130-1502-1850	RES. CF 15Kohm 1/8W J A	
547	RH21	0130-1001-1850	RES. CF 1.0Kohm 1/8W J A	
548	RH22	0130-3902-1850	RES. CF 39Kohm 1/8W J A	
549	RH24	0130-1002-1850	RES. CF 10Kohm 1/8W J A	
550	RH25	0130-2201-1250	RES. CF 2.2Kohm 1/2W J A	

Confidential – Do Not Copy

ITEM	LOC	PART NO	DESCRIPTION	REMARK
551	RH28	0132-3302-0252	RES. MOF 33Kohm 2W J A-FK	
552	RH30	0135-5608-0551	RES. CEMENT 5.6ohm 5W J SQM	
553	RH31	0130-4709-1450	RES. CF 47ohm 1/4W J A	
554	RH32	0130-1002-1850	RES. CF 10Kohm 1/8W J A	
555	RH33	0130-1009-1450	RES. CF 10ohm 1/4W J A	
556	RH34	0132-2708-0252	RES. MOF 2.7ohm 2W J A-FK	
557	RH35	0130-1001-1850	RES. CF 1.0Kohm 1/8W J A	
558	RH36	0130-1002-1850	RES. CF 10Kohm 1/8W J A	
559	RH38	0230-5008-0000	JUMPER WIRE 5.0*0.6mm	
560	RH40	0135-5608-0551	RES. CEMENT 5.6ohm 5W J SQM	
561	RH41	0135-2208-0551	RES. CEMENT 2.2ohm 5W J SQM	
562	RH42	0132-0158-0152	RES. MOF 0.15ohm 1W J A-FK	
563	RH43	0133-2200-0152	RES. MOF(M) 220ohm 1W J A-FK	
564	RH44	0130-1009-1450	RES. CF 10ohm 1/4W J A	
565	RH45	0130-4700-1850	RES. CF 470ohm 1/8W J A	
566	RH50	0130-1001-1850	RES. CF 1.0Kohm 1/8W J A	
567	RH51	0130-2709-1450	RES. CF 27ohm 1/4W J A	
568	RH52	0133-1008-0552	RES. MOF(M) 1ohm 5W J A-FK	
569	RH53	0130-4700-1250	RES. CF 470ohm 1/2W J A	
570	RH54	0132-3308-0252	RES. MOF 3.3ohm 2W J A-FK	
571	RH55	0132-1000-0252	RES. MOF 100ohm 2W J A-FK	
572	RH56	0130-4700-1450	RES. CF 470ohm 1/4W J A	
573	RH57	0130-2701-1850	RES. CF 2.7Kohm 1/8W J A	
574	RH58	0130-1001-1850	RES. CF 1.0Kohm 1/8W J A	
575	RH63	0130-3309-1450	RES. CF 33ohm 1/4W J A	
576	RH64	0130-4701-1850	RES. CF 4.7Kohm 1/8W J A	
577	RH66	0130-2202-1450	RES. CF 22Kohm 1/4W J A	
578	RH67	0130-2202-1450	RES. CF 22Kohm 1/4W J A	
579	RH68	0130-2202-1450	RES. CF 22Kohm 1/4W J A	
580	RH70	0130-3908-1250	RES. CF 3.9ohm 1/2W J A	
581	RH71	0230-5008-0000	JUMPER WIRE 5.0*0.6mm	
582	RH72	0130-4702-1850	RES. CF 47Kohm 1/8W J A	
583	RH73	0130-1001-1450	RES. CF 1.0Kohm 1/4W J A	
584	RH74	0130-1001-1450	RES. CF 1.0Kohm 1/4W J A	
585	RH76	0131-3012-1410	RES. MF 30.1Kohm 1/4W F A	
586	RH77	0130-4701-1850	RES. CF 4.7Kohm 1/8W J A	
587	RH78	0130-3301-1850	RES. CF 3.3Kohm 1/8W J A	
588	RH79	0130-1001-1450	RES. CF 1.0Kohm 1/4W J A	
589	RH80	0130-1002-1850	RES. CF 10Kohm 1/8W J A	
590	RH81	0130-2202-1450	RES. CF 22Kohm 1/4W J A	
591	RH82	0130-2403-1450	RES. CF 240Kohm 1/4W J A	
592	RH87	0130-2202-1850	RES. CF 22Kohm 1/8W J A	
593	RH88	0130-4702-1850	RES. CF 47Kohm 1/8W J A	
594	RLA01	0252-1250-2012	RELAY 2POLES 250V/5A/12Vdc ST	
595	RLH01	0251-1210-0016	RELAY 1POLES 240V/10A/12Vdc DT	
596	SWA01B	1712-0100-3300	POWER BRACKET	
597	TA01	0352-0200-0010	LINE FILTER BF-28 15mH-15mH	
598	TA02	0350-0419-0030	X'FMR EEL19 5.5mH AT1099DA	
599	TA03	0350-0242-0050	X'FMR EE4215 105uH	
600	TA04	0353-0600-0010	X'FMR SYNC UU10.5 1.75-1.75mH	

Confidential – Do Not Copy

ITEM	LOC	PART NO	DESCRIPTION	REMARK
601	TG01	0480-0000-0070	F.B.T. 26.5KV 3000PF CF1043C	
602	TG02	0351-0125-0020	X'FMR EI25 24:240 Ts	
603	TH02	0351-0213-0010	X'FMR EE13 35mH 250:1	
604	TH03	0351-0122-0010	X'FMR DRIVE EI22 2mH-80uH	
605	THA01	0161-8092-0030	POSISTOR 8ohm 20A 2P	
606	THA02	0230-5008-0000	JUMPER WIRE 5.0*0.6mm	
607	THA03	0160-5094-0920	THERMISTOR 5ohm 4A	
608	VRA01	0151-2013-1001	SVR M/STAND/B 200ohm B 6	
609	VRG01	0151-1033-1002	SVR M/STAND/B 10Kohm B 6	
610	VRH01	0151-1021-1001	SVR M/LAYER/B 1Kohm B 6	
611	VRH02	0151-2023-1001	SVR M/STAND/B 2Kohm B 6	
612	WA01	0262-0000-0012	AC SOCKET 0714C PCB TYPE	
613	WA01W	0460-1701-0041	WH SRA4.3@ 60mm 1015#18 G/Y	
614	WA02	0451-1000-0294	WAFER 10mm 2P/WHITE	
615	WA03	0451-3963-0154	WAFER 3.96mm 3P-1 180'	
616	WA05	0451-2500-0314	WAFER 2.50mm 3P 180' Kink	
617	WB01	0460-1112-0031	WH XH12P-SCN12P 1007#24 160mm + core	
618	WC01	0451-2500-0414	WAFER 2.50mm 4P 180' Kink	
619	WC02	0300-1200-3150	D-SUB Female 90' 15P 3ROW	
620	WC04	0451-2500-0314	WAFER 2.50mm 3P 180' Kink	
621	WC05	0460-1107-0070	WH XH7P-SCN7P 1185#26 150mm + CORE	
622	WC06	0459-2540-0277	PIN HEADER 2.54mm2P 180'11.6mm	
623	WE01	0451-2500-0214	WAFER 2.50mm 2P 180' Kink	
624	WE02	0451-2500-0214	WAFER 2.50mm 2P 180' Kink	
625	WE03	0451-2000-0204	WAFER 2.00mm 2P 180'Kink	
626	WG01	0459-2540-0277	PIN HEADER 2.54mm2P 180'11.6mm	
627	WH02	0451-3963-0154	WAFER 3.96mm 3P-1 180'	
628	WH03	0451-3960-0654	WAFER 3.96mm 6P 180'	
629	XTAC01	0280-0800-0013	X'TAL 8MHZ 49/U	
630	ZDA02	0400-1751-2000	ZENER 18-2 17.5-18.3V 1/2W	
631	ZDA03	0400-1751-2000	ZENER 18-2 17.5-18.3V 1/2W	
632	ZDA04	0400-0891-2000	ZENER 9C1 8.9-9.3V 1/2W	
633	ZDC02	0400-0581-2000	ZENER 6C1 5.8-6.1V 1/2W	
634	ZDC03	0400-0581-2000	ZENER 6C1 5.8-6.1V 1/2W	
635	ZDH01	0400-1261-2000	ZENER 12B2 12.6-13.1V 1/2W	
636	ZDH02	0400-0671-2000	ZENER 7B1 6.7-7.0V 1/2W	
637	ZDH03	0400-1021-2000	ZENER 11B1 10.2-10.6V 1/2W	
638	ZDH04	0400-1261-2000	ZENER 12B2 12.6-13.1V 1/2W	

Confidential – Do Not Copy

ViewSonic Corporation

REV LTR	DATE	REV.DIMENSION	DESIGN	APPROVE
1				

ITEM	PART NO.	DESCRIPTION	QTY
1	1701-0104-5010	BEZEL VIEWSONIC PF775	1
2	3017-0082-0164	ASS'Y TCO BD AT897D-1	1
3	1701-0402-2000	POWER KNOB	1
4	1712-0300-1300	TCO PLT-A/PT771	1
5	0210-0170-1255	CRT 17" M41LPE21X12 MIT	1
6	0460-2202-0131	BRAID 0.12/112C 1015#18 810mm	1
7	1947-1500-0300	SPONGE FOR TCO(15*15*6)	2
8	1724-3705-2202	SCREW,BPCTW,#5.0*22L,Zn-Cc	4
9	0333-1700-0320	PURITY COIL 17" 111ohm L:140mm	1
10	1701-1500-1100	CABLE CLAMPS /PC-6	2
11	0330-1700-0920	DEGAUSSING 17" 16ohm 0.45*95Ts	1 Set
12	1712-0100-0860	SUPPORT BKT LEFT	1
13	1712-0600-0200	COPPER CLAW	2
14	1724-2603-0602	SCREW,BTCW,M3*6L,Zn-Cc	-
15	1712-0700-0600	SPRING /PT771/P795	1
16	0220-2020-0261	SW PUSH BOTTOM SFDLD11E7U-AA	1
17	1712-0300-0210	TCO PLT-B/PF775	1
18	1701-0402-1000	FUNCTION KNOB PF775	1
19	3017-0142-0156	ASS'Y DISPLAY BD PF775	1
20	1724-2603-0802	SCREW,BTCW,M3*8L,Zz-Cc	-
21	1724-2603-1002	SCREW,BTCW,M3*10L,Zn-Cc	-
22	1712-0100-0850	SUPPORT BKT RIGHT	1
23	1712-0100-0590	CHASSIS BKT FRONT	1
24	1712-0100-0163	CHASSIS BKT RIGHT	1
25	3017-0322-0160	ASS'Y MAIN/PWR/CTRL BD PF775	1
26	1712-0100-3300	POWER BKT	1
27	1712-0100-3201	CHASSIS BKT REAR/AT897D	1
28	1701-0800-0080	PLATE PT775-6	1
29	1724-3804-0802	SCREW,PBATW,M4*8L,Zz-Cc	1
30	1701-1500-0900	SPACER SUPPORTS /FCB-10	2
31	1712-0500-0140	SHIELD PLATE FOR EMI	1
32	1712-0500-0260	CRT BD SHIELDING-B	1
33	3017-0252-0151	ASS'Y VIDEO BD PF775	1
34	1712-0500-0161	CRT BD SHIELDING-A	1

ITEM	PART NO.	DESCRIPTION	QTY
35	1712-0100-4600	VIDEO BD BKT AT1097F/P795/PT771	1
36	1701-1000-0100	PLASTIC FOOT /GL-24H	2
37	1712-0800-0040	GROUNDING CLIPS WC-3L-DC	1
38	3019-0072-0301	BASE ASSY	1
39	1936-1100-1300	B/C LABEL V.SONIC PF775 -M TC099	1
40	1712-0100-0151	CHASSIS BKT LEFT	1
41	1936-1500-0100	FAD WARNING LBL AT897D/F/C	1
42	1947-1500-0100	SPONGE FOR CRT BD 80L*80W*45T	1
43	1701-0200-8012	BACK COVER GT775-2 FIXED CABLE	1
44	1724-2304-1402	SCREW,BBC,M4*14L,Zn-Cc	-
45	1701-1000-0200	BAES FOOT	3
46	1936-1000-0100	V.SONIC LOGO (AL. PLATE)	1

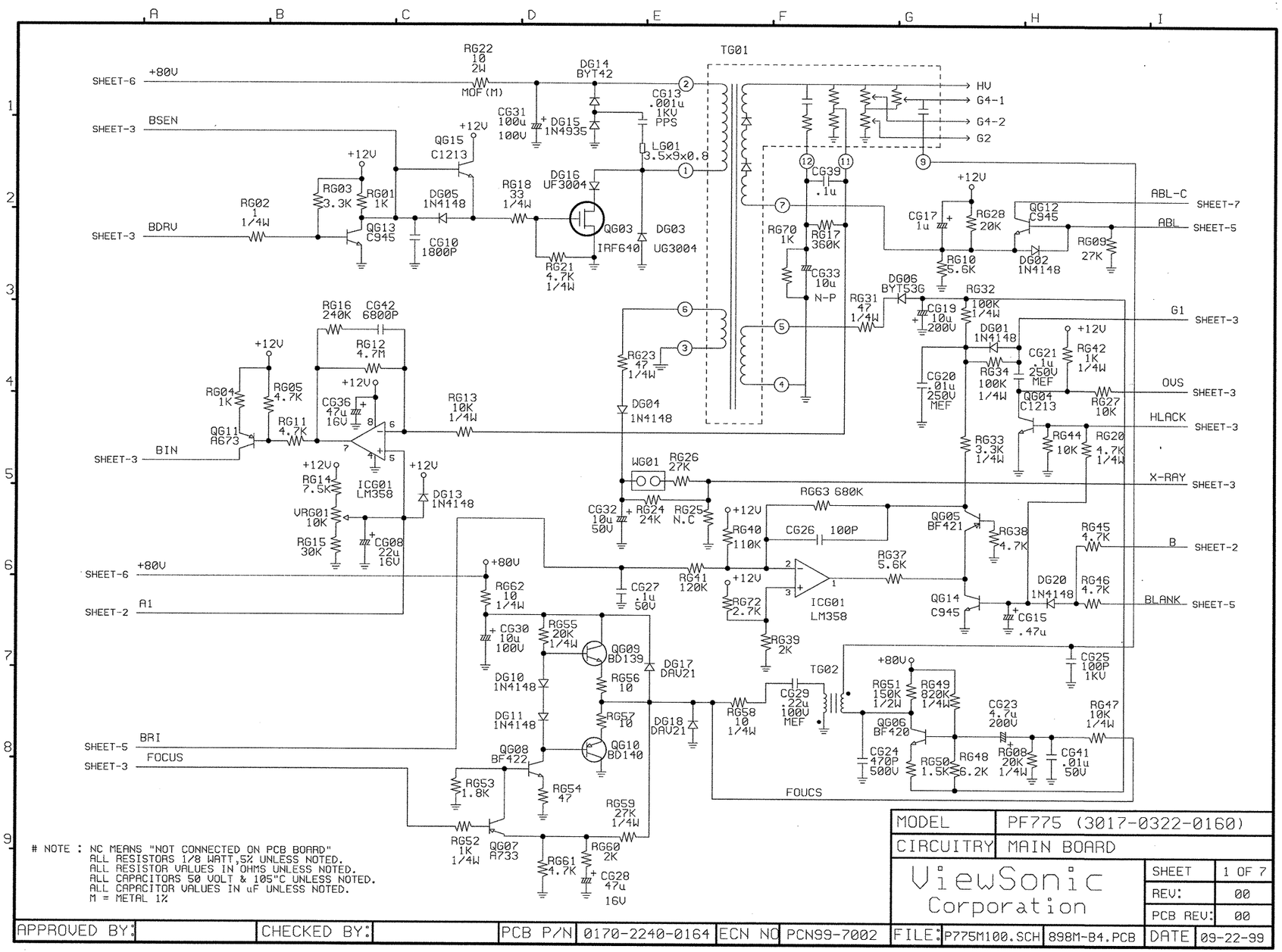
DESCRIPTION	PART NO.
PF775 -P	2017-2312-7227
PF775 -A	2017-2612-7227
PF775 -J	2017-2412-7227
PF775 -E	2017-2110-7227
PF775 -M	2017-2210-7227

Confidential - Do Not Copy

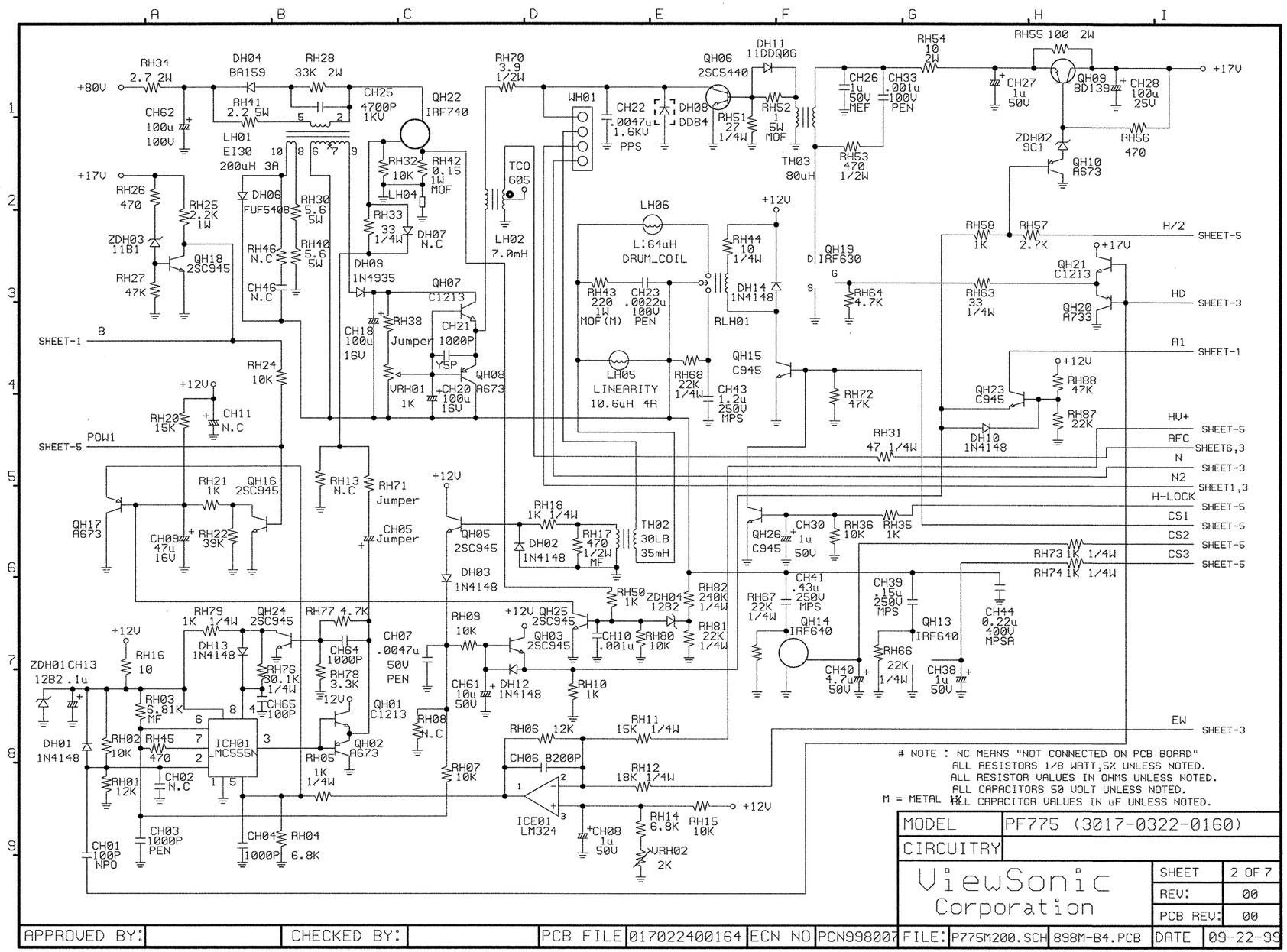
UNLESS OTHERWISE NOTED .XX = ±0.10 .X = ±0.2 ANG. = ±1/2°		ViewSonic Corporation	THIRD ANGLE PROJECTION	MODEL No.: PF775-M/-E/-J/-A/-P	
	DSN.: jessie yu	10/11/'99	MATERIAL: ******	DWG. NAME: 17" CASE ASS'Y	
	CHK.:		Q'TY: * SIZE: A4		
	APPD.:		SCALE: *:* UNIT: MM	DWG. No.: PF775CA	REV. 0 SHEET: 2 OF 2

PF775

(01,09)



Confidential - Do Not Copy

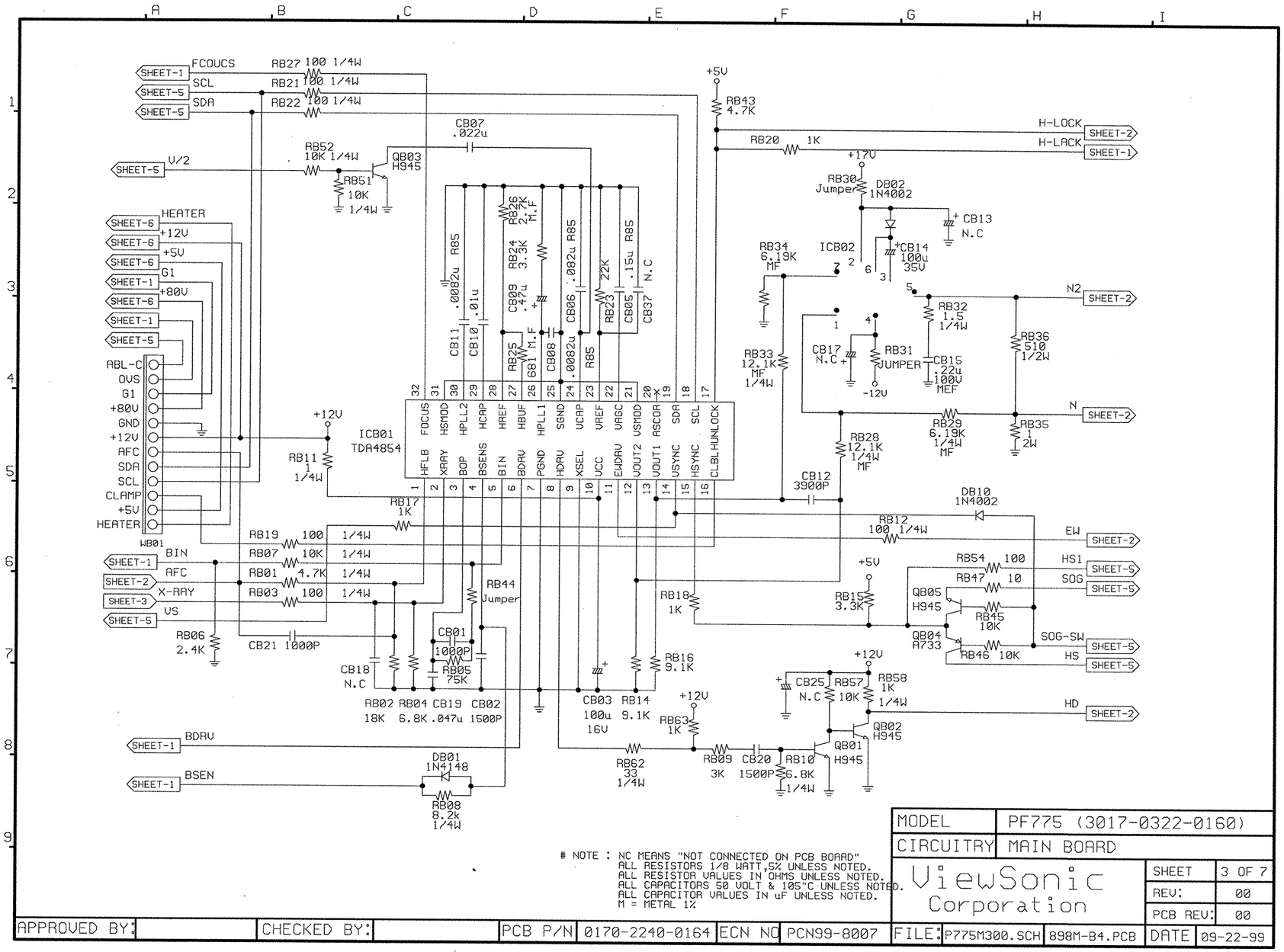


NOTE : NC MEANS "NOT CONNECTED ON PCB BOARD"
ALL RESISTORS 1/8 WATT,5% UNLESS NOTED.
ALL RESISTOR VALUES IN OHMS UNLESS NOTED.
ALL CAPACITORS 50 VOLT UNLESS NOTED.
M = METAL FILM ALL CAPACITOR VALUES IN uF UNLESS NOTED.

APPROVED BY:		CHECKED BY:		PCB FILE	017022400164	ECN NO	PCN998007	FILE:	P775M200.SCH	898M-B4.PCB	DATE 09-22-99

MODEL	PF775 (3017-0322-0160)
CIRCUITRY	
ViewSonic Corporation	SHEET 2 OF 7
	REV: 00
	PCB REV: 00

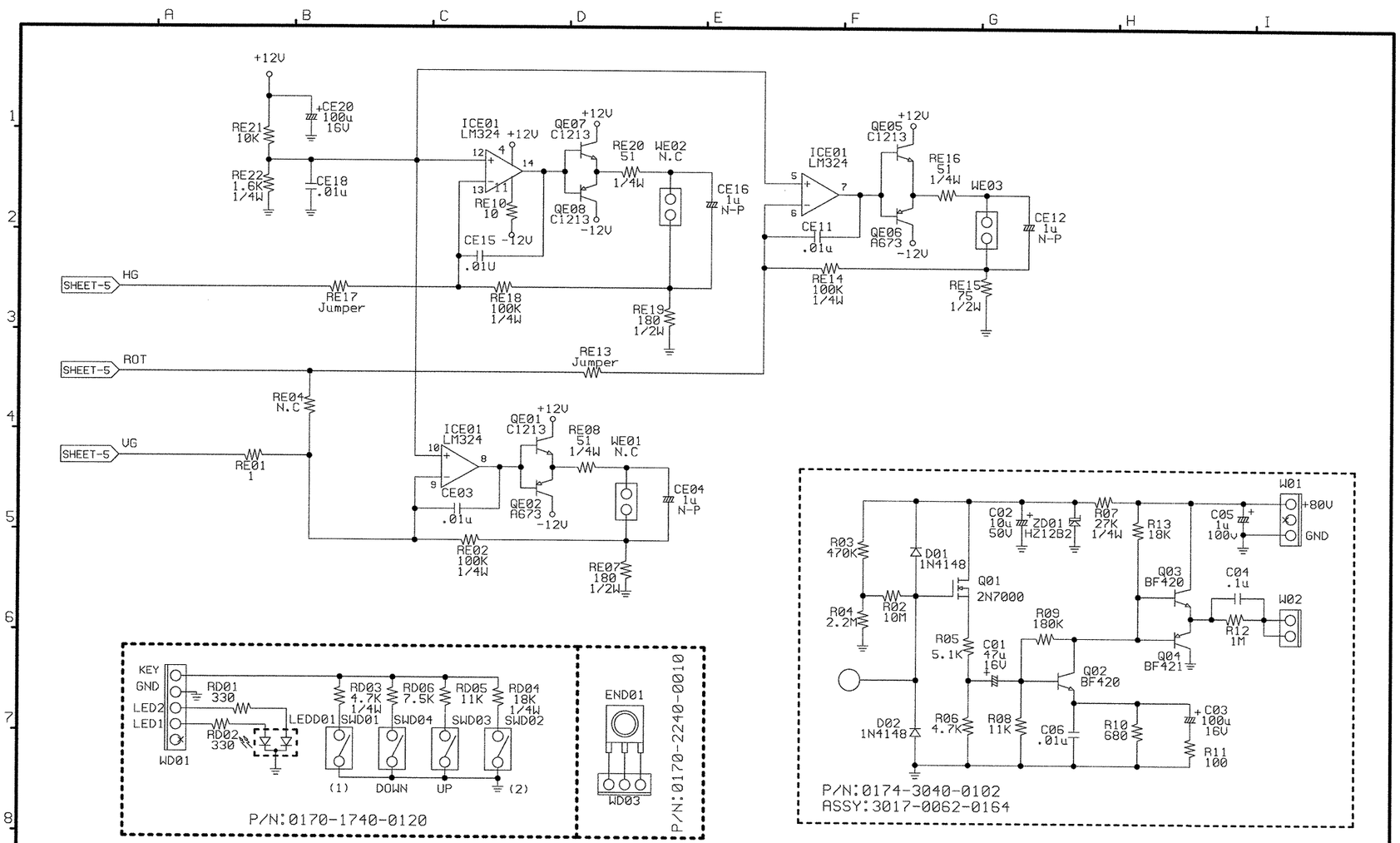
Confidential - Do Not Copy



NOTE : NC MEANS "NOT CONNECTED ON PCB BOARD"
ALL RESISTORS 1/8 WATT,5% UNLESS NOTED.
ALL RESISTOR VALUES IN OHMS UNLESS NOTED.
ALL CAPACITORS 50 VOLT & 105°C UNLESS NOTED.
ALL CAPACITOR VALUES IN uF UNLESS NOTED.
M = METAL 1%

MODEL	PF775 (3017-0322-0160)								
CIRCUITRY	MAIN BOARD								
ViewSonic Corporation								SHEET	3 OF 7
								REV:	00
								PCB REV:	00
APPROVED BY:		CHECKED BY:		PCB P/N	0170-2240-0164	ECN NO	PCN99-8007	FILE:	P775M300.SCH 898M-B4.PCB
								DATE	09-22-99

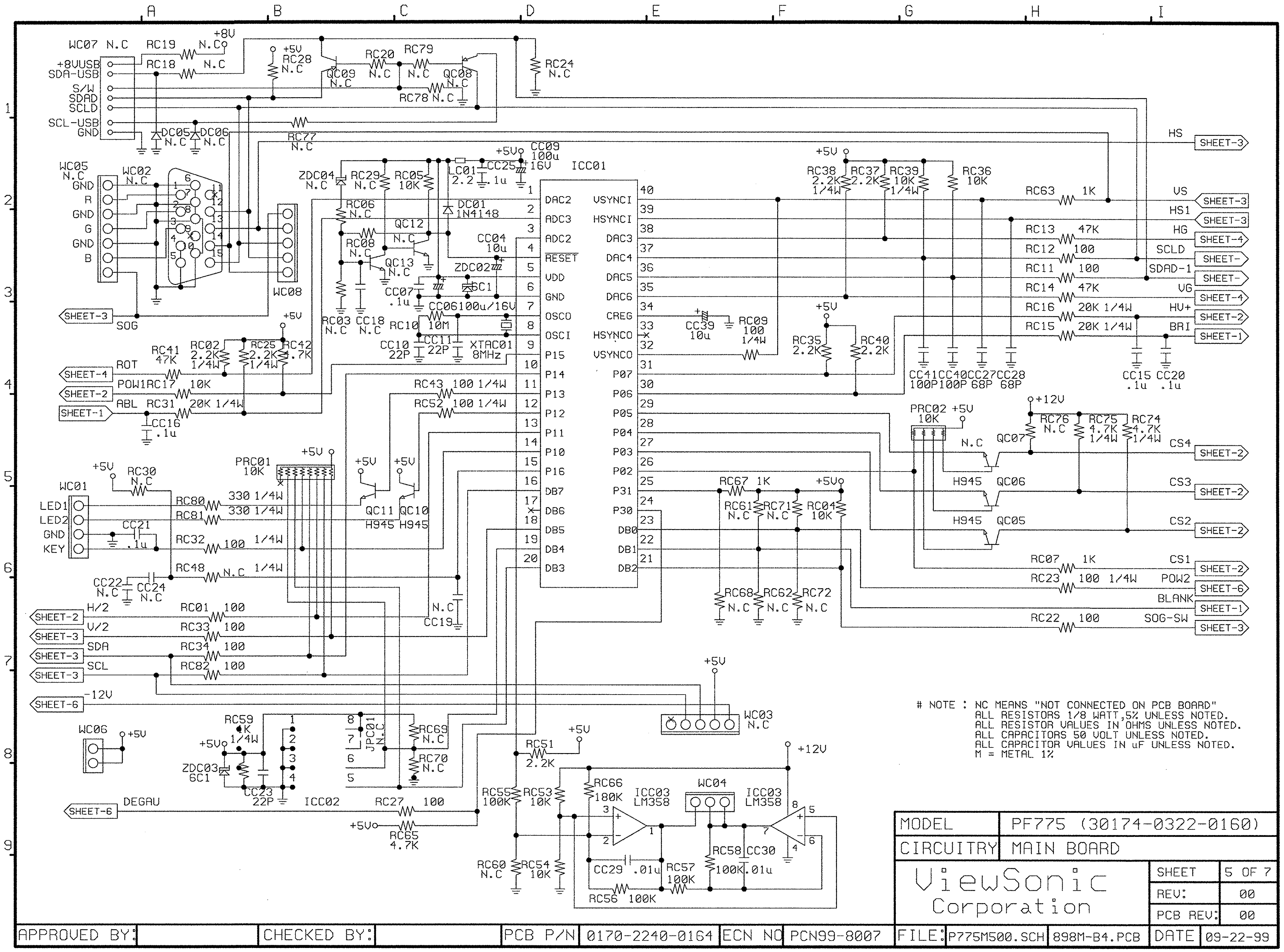
Confidential - Do Not Copy



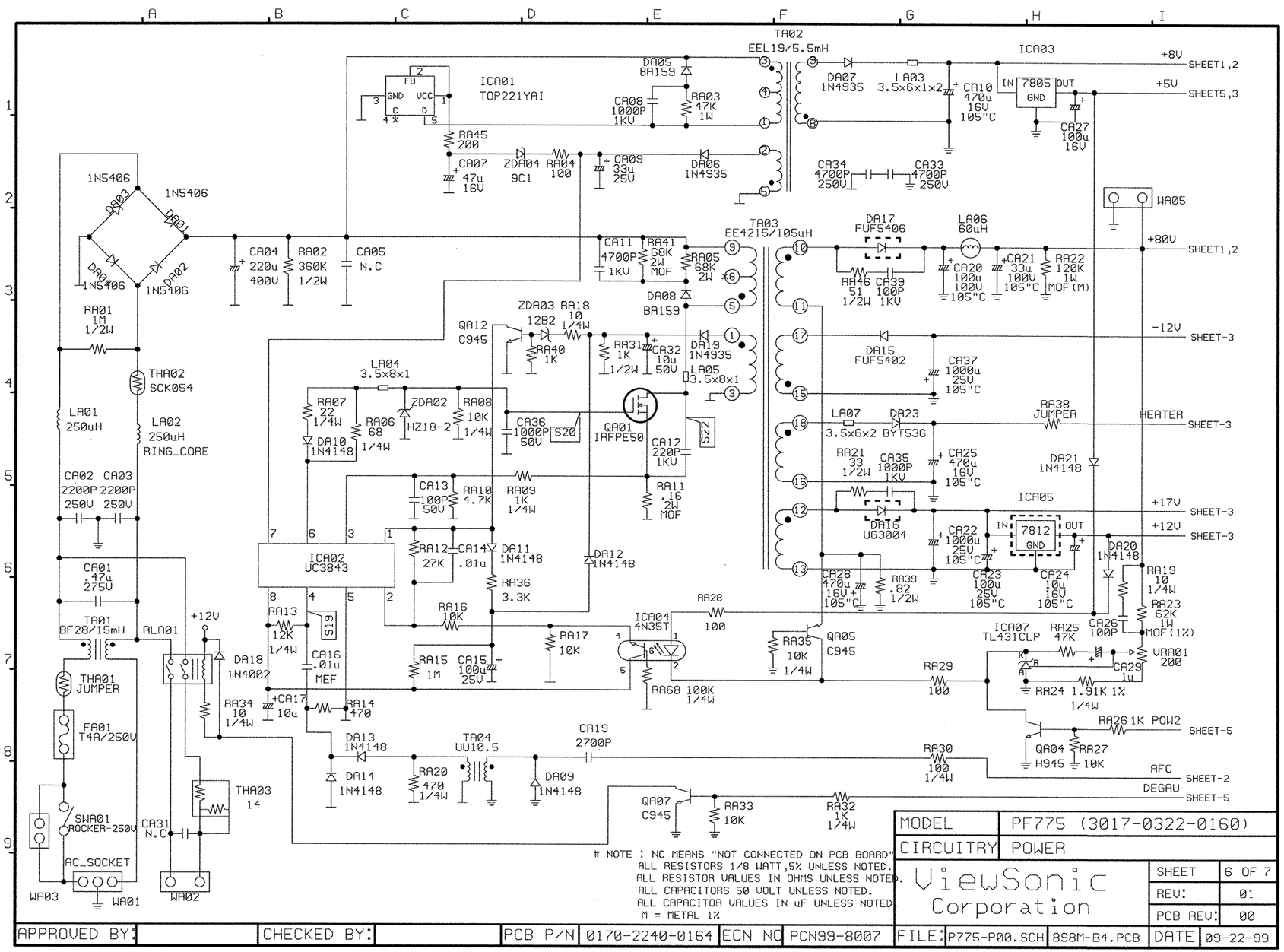
NOTE : NC MEANS "NOT CONNECTED ON PCB BOARD"
ALL RESISTORS 1/8 WATT,5% UNLESS NOTED.
ALL RESISTOR VALUES IN OHMS UNLESS NOTED.
ALL CAPACITORS 50 VOLT & 105"C UNLESS NOTED.
ALL CAPACITOR VALUES IN uF UNLESS NOTED.
M = METAL 1%

MODEL	PF775 (3017-0322-0160)								
CIRCUITRY	CONVERGENCE,DISPLAY & TCO								
ViewSonic Corporation								SHEET	4 OF 7
								REV:	00
								PCB REV:	00
APPROVED BY:		CHECKED BY:		PCB P/N	0170-2240-0164	ECN NO	PCN99-8007	FILE: P775M400.SCH 898M-B4.PCB	DATE 09-22-99

Confidential - Do Not Copy



A B C D E F G H I
1 2 3 4 5 6 7 8 9
WC07 N.C
+8VUSB
SDA-USB
S/W
SDAD
SCLD
SCL-USB
GND
RC19 N.C +8V
RC18 N.C
RC28 N.C +5V
QC09 N.C
RC20 N.C
RC79 N.C
QC08 N.C
RC78 N.C
RC24 N.C
DC05 N.C
DC06 N.C
RC77 N.C
WC05 N.C
WC02 N.C
GND R GND G GND B
WC08
SOG
ROT
POW1
ABL
RC41 47K
RC17 10K
RC31 20K 1/4W
CC16 .1u
RC02 2.2K 1/4W
RC25 2.2K 1/4W
RC42 4.7K
ZDC04 N.C
RC29 N.C
RC05 10K
RC06 N.C
RC08 N.C
QC12 N.C
QC13 N.C
RC03 N.C
CC18 N.C
CC07 .1u
CC06 100u/16V
ZDC02 6C1
LC01 2.2
CC25 .1u
CC09 100u 16V
DC01 1N4148
CC04 10u
RC10 10M
CC10 22P
CC11 22P
XTAC01 8MHz
ICC01
DAC2 ADC3 ADC2 RESET VDD GND OSCO OSCI P15 P14 P13 P12 P11 P10 P16 DB7 DB6 DB5 DB4 DB3
VSYNCI HSYNCI DAC3 DAC4 DAC5 DAC6 CREG HSYNCO VSYNCO P07 P06 P05 P04 P03 P02 P31 P30 DB0 DB1 DB2
CC39 10u
RC09 100 1/4W
RC38 2.2K 1/4W
RC37 2.2K
RC39 10K 1/4W
RC36 10K
RC35 2.2K
RC40 2.2K
CC41 100P
CC40 100P
CC27 68P
CC28 68P
RC63 1K
RC13 47K
RC12 100
RC11 100
RC14 47K
RC16 20K 1/4W
RC15 20K 1/4W
CC15 .1u
CC20 .1u
HS VS HS1 HG SCLD SDAD-1 VG HV+ BRI
SHEET-1 SHEET-2 SHEET-3 SHEET-4 SHEET-6
RC43 100 1/4W
RC52 100 1/4W
PRC01 10K
QC11 H945
QC10 H945
WC01
LED1 LED2 GND KEY
RC30 N.C
RC80 330 1/4W
RC81 330 1/4W
CC21 .1u
RC32 100 1/4W
RC48 N.C 1/4W
CC22 N.C
CC24 N.C
CC19 N.C
H/2 V/2 SDA SCL -12V
RC01 100
RC33 100
RC34 100
RC82 100
PRC02 10K
QC07 N.C
QC06 H945
QC05 H945
RC76 N.C
RC75 4.7K 1/4W
RC74 4.7K 1/4W
+12V
CS4 CS3 CS2 CS1 POW2 BLANK SOG-SW
RC67 1K
RC61 N.C
RC71 N.C
RC04 10K
RC68 N.C
RC62 N.C
RC72 N.C
RC07 1K
RC23 100 1/4W
RC22 100
WC03 N.C
WC06
RC59 1K 1/4W
ZDC03 6C1
CC23 22P
ICC02
JPC01 N.C
RC69 N.C
RC70 N.C
DEGAU
RC27 100
RC65 4.7K
RC51 2.2K
RC55 100K
RC53 10K
RC60 N.C
RC54 10K
RC66 180K
ICC03 LM358
WC04
CC29 .01u
RC57 100K
RC56 100K
RC58 100K
CC30 .01u
NOTE : NC MEANS "NOT CONNECTED ON PCB BOARD"
ALL RESISTORS 1/8 WATT,5% UNLESS NOTED.
ALL RESISTOR VALUES IN OHMS UNLESS NOTED.
ALL CAPACITORS 50 VOLT UNLESS NOTED.
ALL CAPACITOR VALUES IN uF UNLESS NOTED.
M = METAL 1%
MODEL PF775 (30174-0322-0160)
CIRCUITRY MAIN BOARD
ViewSonic Corporation
SHEET 5 OF 7
REV: 00
PCB REV: 00
APPROVED BY:
CHECKED BY:
PCB P/N 0170-2240-0164
ECN NO PCN99-8007
FILE: P775M500.SCH 898M-B4.PCB
DATE 09-22-99

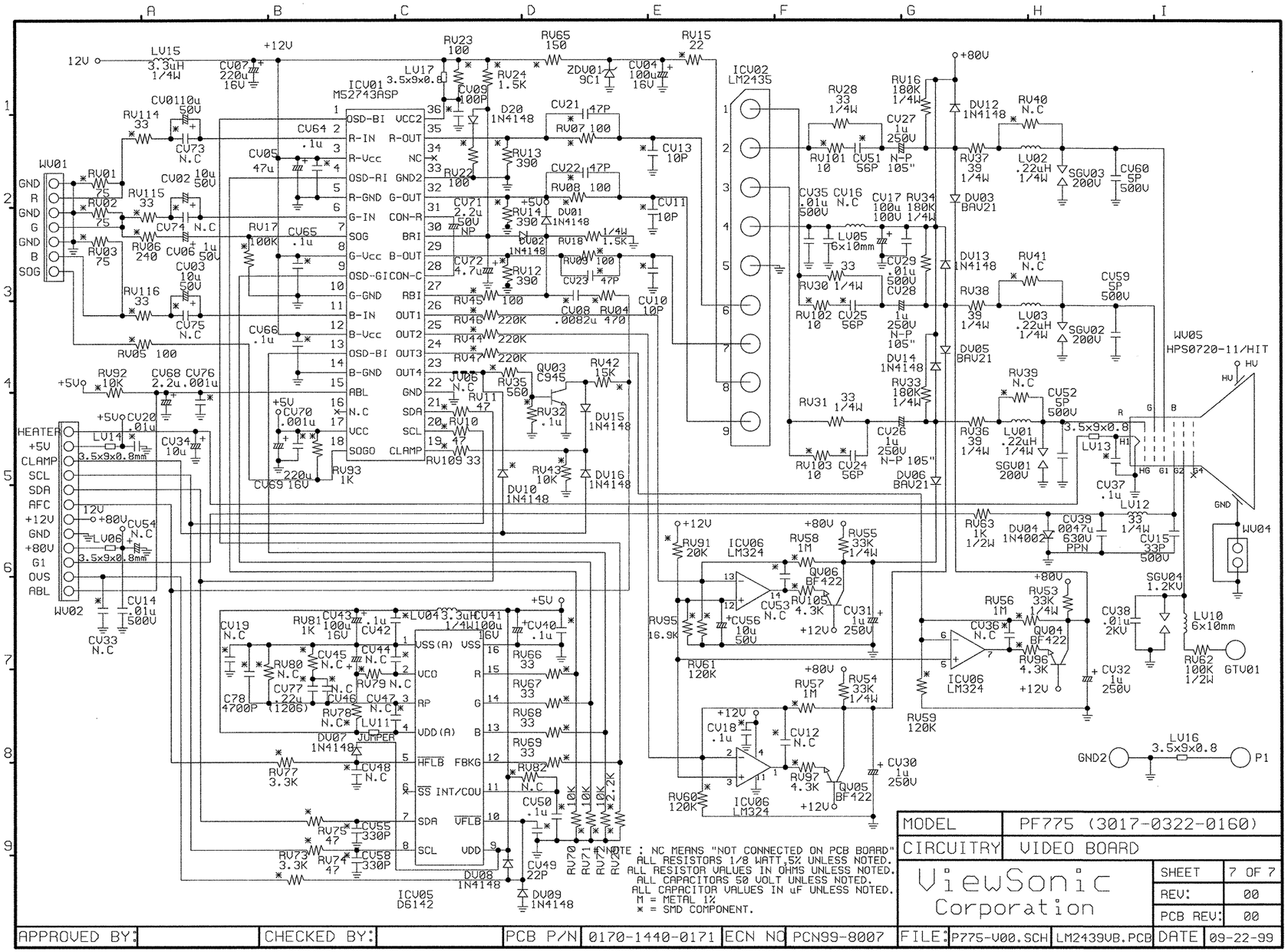


NOTE : NC MEANS "NOT CONNECTED ON PCB BOARD"
ALL RESISTORS 1/8 WATT,5% UNLESS NOTED.
ALL RESISTOR VALUES IN OHMS UNLESS NOTED.
ALL CAPACITORS 50 VOLT UNLESS NOTED.
ALL CAPACITOR VALUES IN uF UNLESS NOTED.
M = METAL 1%

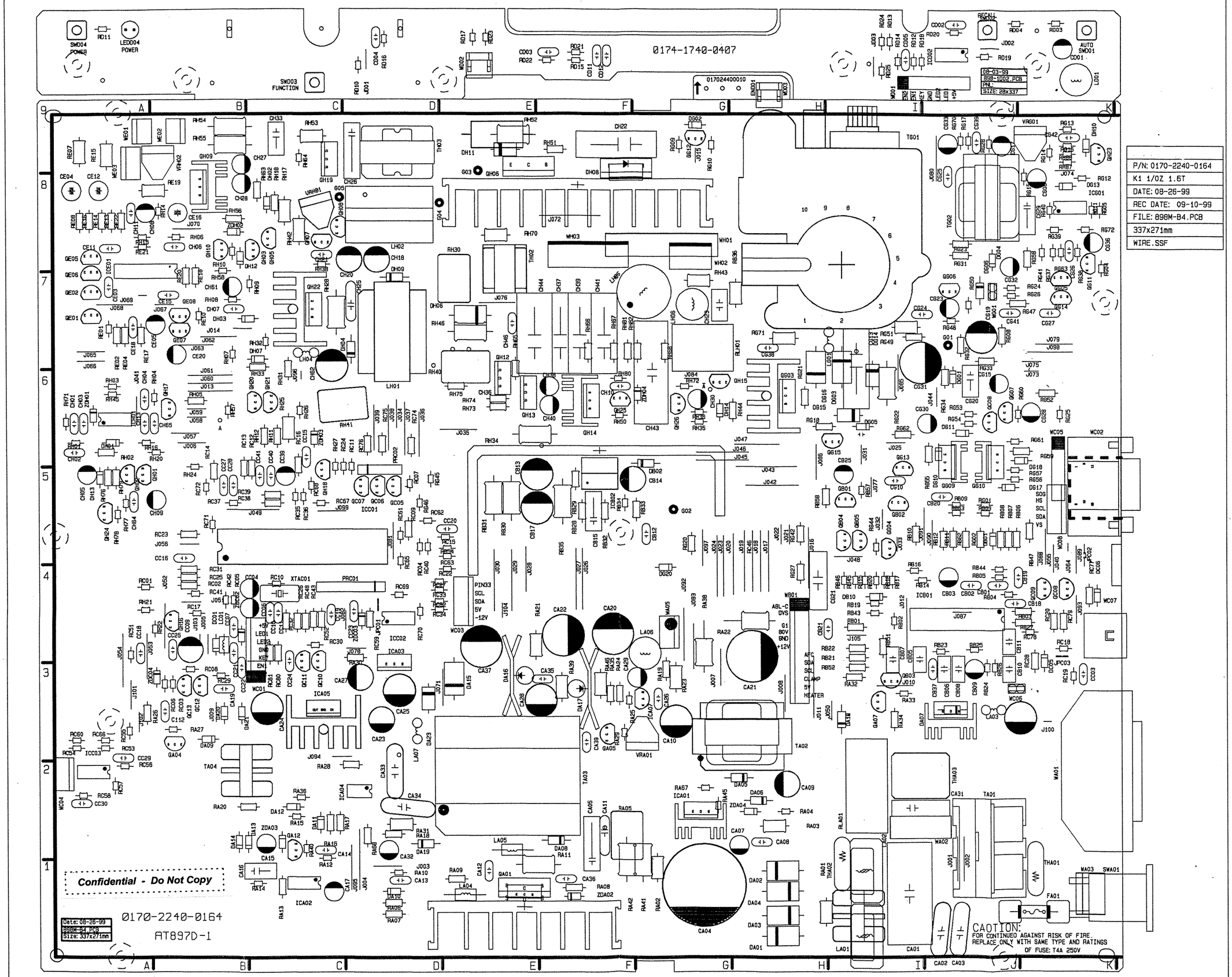
APPROVED BY:		CHECKED BY:		PCB P/N	0170-2240-0164	ECN NO	PCN99-8007	FILE:	P775-P00.SCH	898M-B4.PCB	DATE 09-22-99

MODEL	PF775 (3017-0322-0160)
CIRCUITRY	POWER
ViewSonic Corporation	SHEET 6 OF 7
	REV: 01
	PCB REV: 00

Confidential - Do Not Copy

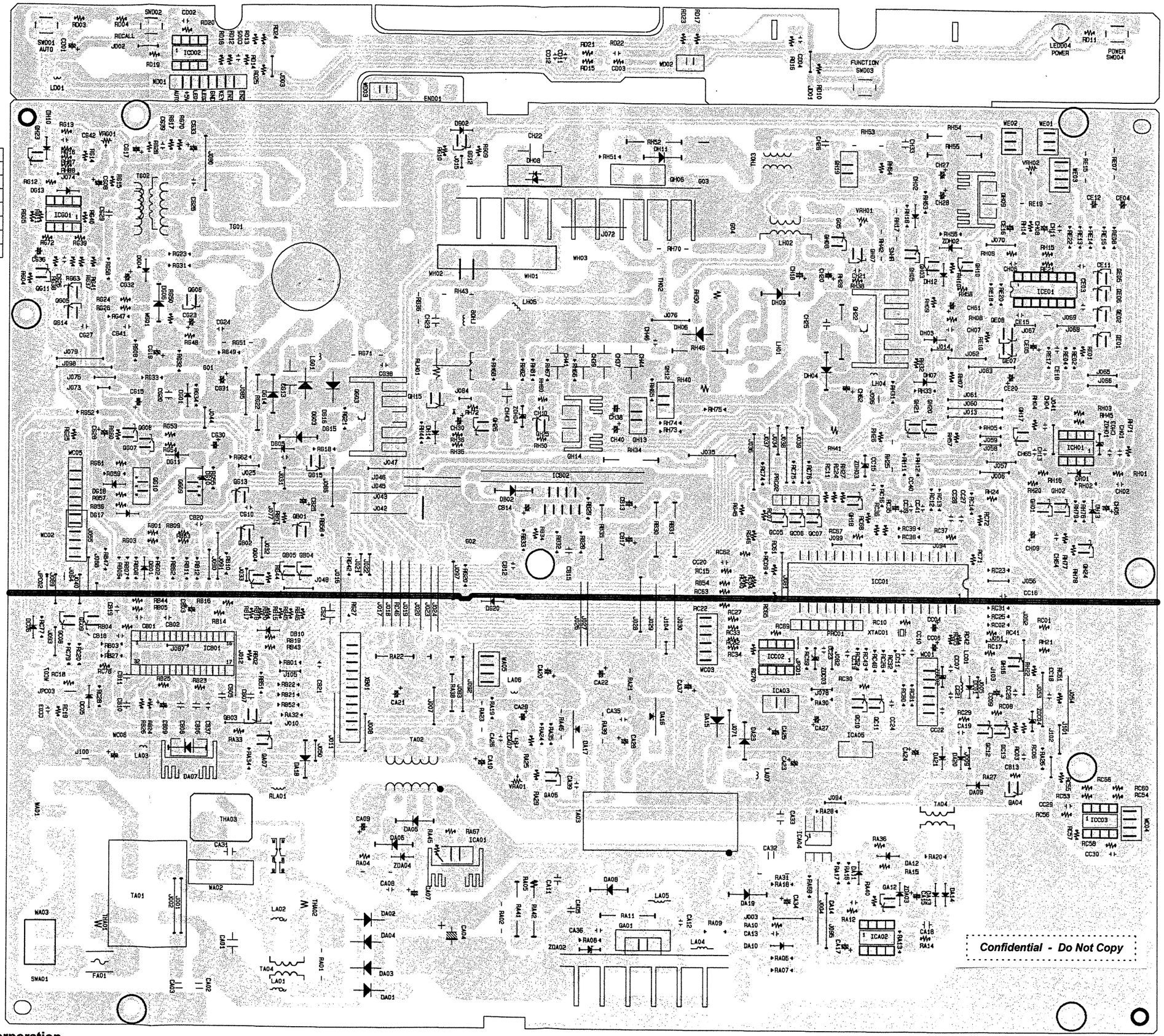


Confidential - Do Not Copy



P/N: 0170-2240-0164
K1 1/0Z 1.6T
DATE: 08-26-99
REC DATE: 09-10-99
FILE: 898M-B4.PCB
337x271mm
WIRE.SSF

P/N: 0170-2540-0164
K1 1/02 1.6T
DATE: 08-26-99
REC DATE: 09-10-99
FILE: 888M-B4.PCB
337x271mm
MIRE.SSF



ViewSonic Corporation

PF775

ViewSonic Corp	DATE: 08-18-99
P/N: 0170-1440-0171	REC DATE: 08-24
SIZE: 150.0x120.0mm	Q'TY: 10 PNL
V0 1.6t 1/0z	LM2439VB.PCB

DRAWING BY:
CHECK BY:

0170-1440-0171

DRAWING BY:
CHECK BY:
SOLDER SIDE

DATE: 08-18-99
REC DATE: 08-24
Q'LY: 10 PNL
LM2439VB.PCB

P/N: 0170-1440-0171
SIZE: 150.0x120.0mm
VO 1.6t 1/0z

Confidential - Do Not Copy

CHECH BY:
DRAWING BY:

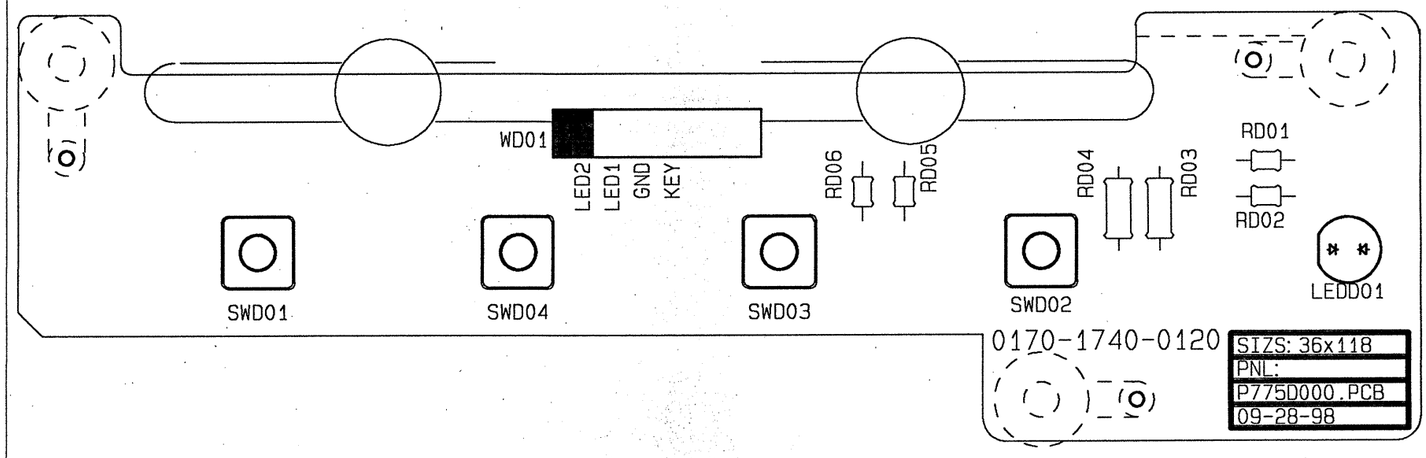
ViewSonic Corp	
01743040102	REC DATE: 08-15
CEM1 1/0Z 1.6T	089TC020.PCB
Q'TY: 20 PCS	COMP SIDE TEXT

DATE: 08-09-96
REC DATE: 08-15
089TC020.PCB
COMP SIDE TEXT

DRAWING BY:
CHECH BY:

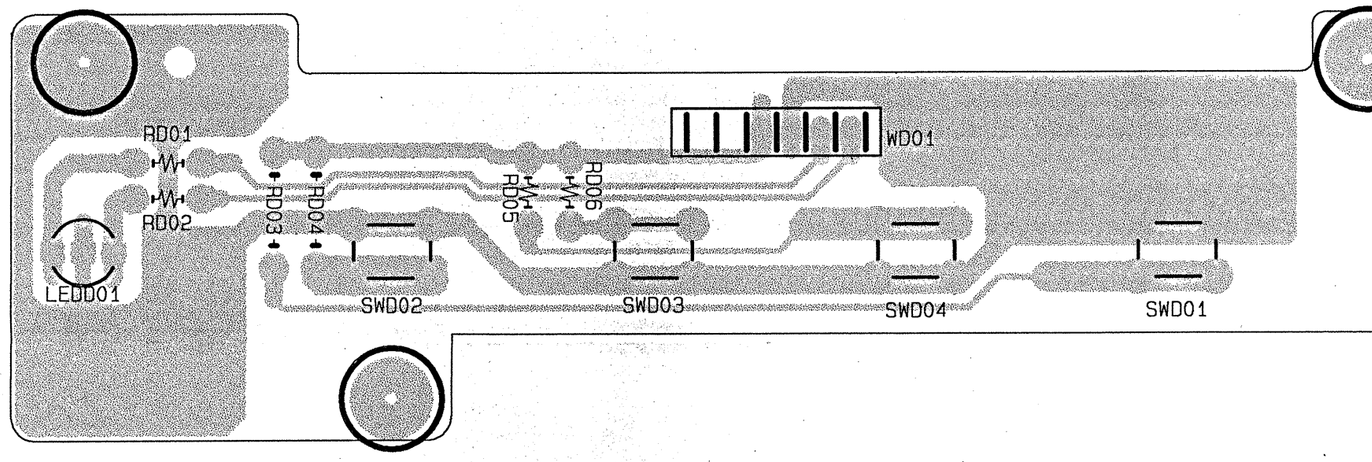
DATE: 08-09-96
REC DATE: 08-15
089TC020.PCB
SOLDER SIDE TEXT

Confidential - Do Not Copy



ViewSonic Corporation	MODEL: P775 (17"19")
P/N: 0170-1740-0120	V0 1/0z 1.6T
Q'TY: 10 PCS	P775D000.PCB
DATE: 09-28-98	REC DATE: 10-05

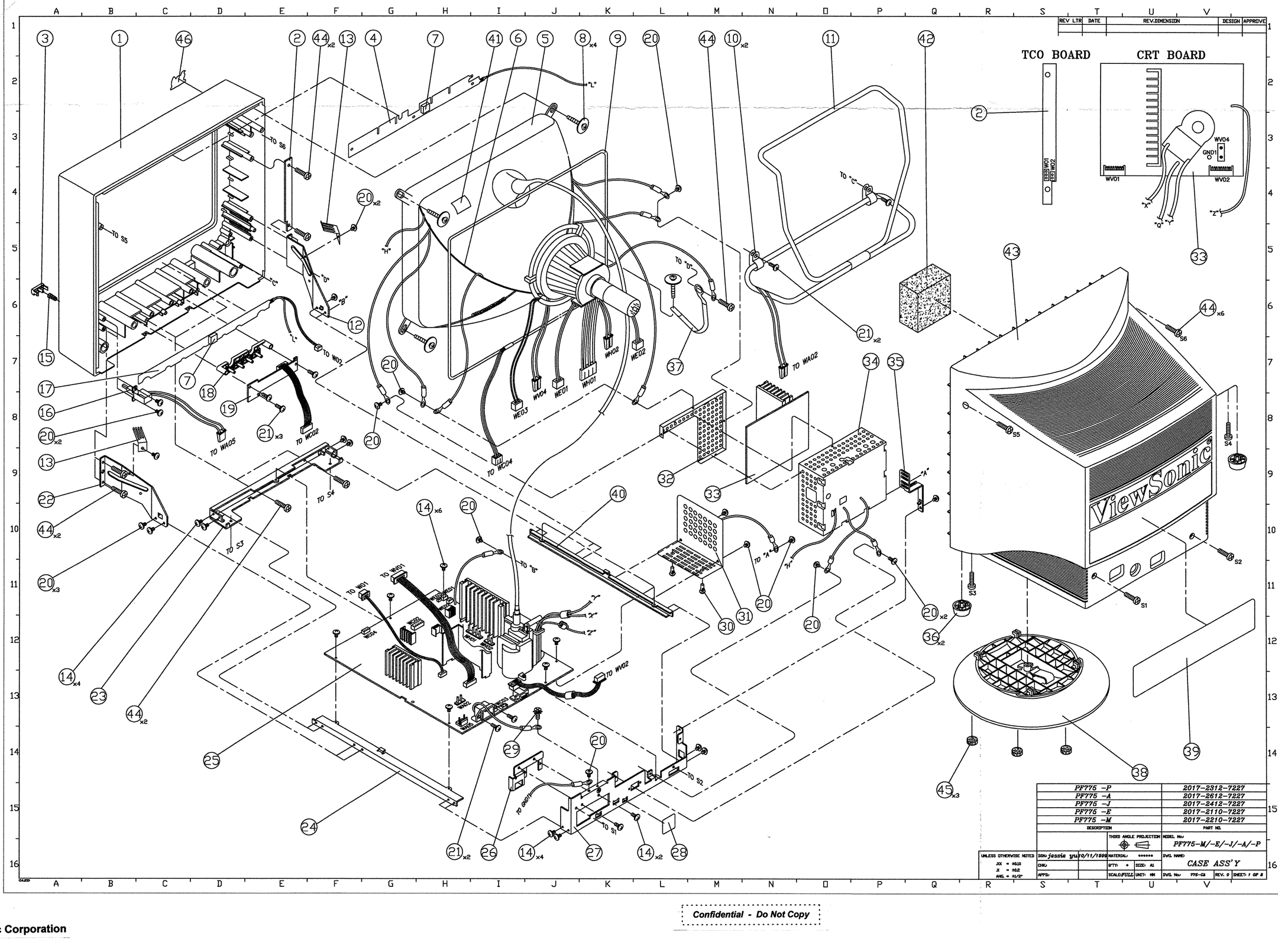
COMP SIDE TEXT



SOLDER SIDE TEXT

	MODEL: P775 (17"19")
P/N: 0170-1740-0120	V0 1/0z 1.6T
Q'TY: 10 PCS	P775D000.PCB
DATE: 09-28-98	REC DATE: 10-05

Confidential - Do Not Copy



PF775 -P		2017-2312-7227
PF775 -A		2017-2612-7227
PF775 -J		2017-2412-7227
PF775 -E		2017-2110-7227
PF775 -M		2017-2210-7227
DESCRIPTION		PART NO.

THIRD ANGLE PROJECTION — MODEL No.: PF775-M/-E/-J/-A/-P

UNLESS OTHERWISE NOTED	DSN: jessie yu 10/11/1999	MATERIAL: ******	DWG. NAME: CASE ASS'Y
XX = ±0.10	CHK:	QTY: 0	SIZE: A1
X = ±0.2	APP'D:	SCALE:FULL	UNIT: MM
ANG. = ±1/2°			DWG. No.: 775-C1 REV. 0 SHEET: 1 OF 2

Confidential - Do Not Copy